Scottish & Southern Electricity Networks
TRANSMISSION

SSEN Transmission

Bingally 400 / 132 kV Substation and Overhead Line Tie-in

Landscape and Habitat Management Plan

April 2025

CONTENTS

TABLES

LIST OF ABBREVIATIONS

ASTI	Accelerated Strategic Transmission Investment
BNG	Biodiversity Net Gain
CEMP	Construction Environmental Management Plan
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
ESO	Electricity system operator
GWDTE	Groundwater Dependent Terrestrial Ecosystem
HND	Holistic Network Design
INNS	Invasive Non-Native Species
LCT	Landscape Character Type
LHMP	Landscape Habitat Management Plan
NPF4	National Planning Framework 4
NVC	National Vegetation Classification
OHL	Overhead line
OTNR	Offshore transmission network review
SEPA	Scottish Environment Protection Agency
SPP	Species Protection Plan
SSEN	Scottish and Southern Electricity Networks
SuDS	Sustainable Urban Drainage System
UK	United Kingdom
UKHab	UK Habitat Classification
ZOI	Zone of Influence

1. INTRODUCTION

1.1.1 The Landscape and Habitat Management Plan (LHMP) is an operational guide to the maintenance and management of the landscape and habitat creation works at the proposed Bingally 400/132kV substation and the proposed Bingally 400kV overhead line (OHL). The LHMP combines the landscape and ecology mitigation measures and wider biodiversity enhancement.

1.1.2 Landscape mitigation measures comprise of new planting to provide full and partial visual screening and to integrate the proposed Bingally substation into the surrounding landscape. Such measures would also seek to provide habitat biodiversity and opportunities for enhancement.

1.1.3 This LHMP sets out the details of habitat creation, maintenance and management actions required for five years, from the date of completion, a detailed summary of the management requirements for the following five years, and an overview of the longer-term management requirements. As part of this it sets out requirements both for operational works and for monitoring and reporting.

1.1.4 It has been designed to provide Scottish and Southern Electricity Networks Transmission (SSEN Transmission) a clear picture of its soft landscape estate and to be used by their appointed contractor and advisors as an operational manual for undertaking management and maintenance works, including monitoring, and reporting.

1.2 Document Structure

1.2.1 This report comprises of the following sections:

- Site Context - a brief description of the Site, its location context and history, including a Site Location Plan.
- Landscape and Ecology condition - describes the key aspects of the environmental baseline relevant to the maintenance and management of the works at the Site.
- Restoration and Design Principles - sets out the design principles followed to develop the LHMP and sets out the function of each habitat type / landscape element.
- Maintenance and Management - including establishment maintenance and long-term management strategy.

2. SITE CONTEXT

2.1 Landscape Context

Location

2.1.1 The Proposed Development Site (hereafter referred to as 'the Site') is illustrated in the Site Location Plan (Figure 2-1, Appendix A Figures). In the context of this LHMP, the Proposed Development encompasses both the proposed 400/132kV Bingally Substation and access track, and the proposed 400kV Bingally OHL. The Site is located approximately 1.2 km south of Tomich and 6 km southwest of the existing Fasnakyle Substation.

2.2 Ecology Context

2.2.1 An Ecological Appraisals recommended mitigation and enhancement measures pertaining to habitats, including completion of a Biodiversity Net Gain (BNG) Assessment to ensure that the proposed Bingally substation meets the requirement of National Planning Framework 4 (NPF4), which includes the following statements of policy intent: "*To protect, restore and enhance natural assets making best use of nature-based solutions*" and "*To protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks.*" NPF4 also states that national developments will only be supported where nature networks "*are in a demonstrably better state than without intervention*" using best practice and including future monitoring and management where appropriate. By conducting a BNG Assessment and implementing habitat mitigation measures to achieve net gain, the proposed Bingally substation will achieve compliance with this aspect of NPF4.

2.2.2 SSEN Transmission has committed to delivering a 10% biodiversity net gain on all projects gaining consent.

2.2.3 Requirements for peat management are also necessary to ensure construction operations adhere to the mitigation hierarchy set out in the NPF4 and it is therefore concluded in the EA that the proposed Bingally substation should prioritise avoiding loss of, or other impacts on, peatlands (e.g. bog habitats) and that consideration should be given to minimising the impacts on these habitats and compensation by on- or off-site enhancement of peatland habitats to achieve an overall biodiversity net gain.

3. LANDSCAPE AND ECOLOGY CONDITION

3.1 Landscape and Visual Condition

3.1.1 The Site is located within the Landscape Character Type (LCT) 222 Rocky Moorland Plateau – Inverness and LCT 227: Farmed Strath - Inverness. The Site is located at the transition between two landscape types characterised by the farmed strath to the west transitioning east to more steeply sloping rocky moorland plateau. The main substation site itself sits within an area of felled plantation woodland, within a wider moorland habitat. The wider the application boundary associated with the proposed Bingally substation access track mostly follows the existing Beauly Denny OHL corridor at the boundary between woodland and upland moor. Vegetation is mostly comprised of heather and open grassland. Forestry operations including felling are commonplace within the study area. Although the Site is located within a plateau landscape more broadly, local landform within the site is undulating.

3.1.2 Areas of Ancient Woodland exist primarily in the north of the Site. The Site is also within two forestry management plans.

3.1.3 Several unnamed watercourses exist within the Site.

3.1.4 The Site is moderately constrained in terms of space by the existing OHL and topography. The land is not expected to be contaminated, there are no unique hazards in this area and no buried services within the area that the substation will be located.

3.1.5 The Site is a greenfield site. Scottish Government National Scale Land Capability for Agriculture Maps indicate that the Site is not located on land classified as prime agricultural land.

3.2 Ecology Condition

3.2.1 The substation platform area is clear-felled commercial plantation, formerly dominated by Sitka spruce *Picea sitchensis*. The vast majority of habitats within forestry plantation areas are subject to on-going impacts from drainage, nutrient-enrichment, and disturbance. Habitats within this area are largely a form of degraded bog, that resembles wet heath (and has a dearth of bog-building species, such as *Sphagnum papillosum*).

3.2.2 The proposed OHL tie in area generally follows the existing OHL corridor at the boundary between woodland and upland moor. The vegetation within this area mostly comprises wet upland heath with heather *Calluna vulgaris*, purple moor-grass *Molinia caerulea* and cross-leaved heath *Erica tetralix* and blanket bog on deep peat with Sphagnum mosses including *Sphagnum capillifolium*, along with occasional patches of purple moor-grass, other upland acid grassland, dry upland heath and bracken.

3.2.3 The area of the proposed Bingally substation access track is largely a near-natural mosaic of woodlands, heaths, and bogs in good condition. Much of the open ground and woodlands in the most northernly 4 km of the track were burnt in a wildfire in May / June 2023, however it is anticipated that all (or nearly all) of these areas will make a full recovery in the long term. The area of the proposed Bingally substation access track includes large tracts of pristine blanket bog and wet heath, along with occasional patches of species-poor purple moor-grass *Molinia caerulea* dominated mires, dry upland acid grassland and bracken-dominated habitat in a mosaic with heathland.

3.2.4 A description of the habitats recorded are described in the following sections, grouped by UK Habitat Classification (UKHab) habitat types. Table 3-1 below summarises the baseline (existing condition) of the Site. Priority habitats present (i.e. those on the Scottish Biodiversity list) are highlighted in bold.

3.2.5 Full details of the baseline present on Site can be found in the relevant EA chapters (Chapters 7 to 9 for the Bingally 400/132 kV Substation EA, and Chapters 4 to 6 for the Bingally 400 kV OHL Tie-in EA).

Table 3-1 Existing Condition

Subject	Existing Condition
Habitats	The following habitats are present within the Site: • w1d Wet woodland; • w1e Upland birchwood; • w1g Other broadleaved woodland; • w1h Other mixed woodland; • w2bOther Scots pine woodland; • w2c Other conifer woodland; • w2c Other conifer woodland (felled); • h3h Mixed scrub; • g1b6 Other upland acid grassland; • g2b6 – H6230 Species-rich Nardus grassland, on siliceous substrates in mountain areas; • h1b5 – H4030 European dry heaths; • h1b6 – H4010 North Atlantic wet heaths with Erica tetralix; • f1a5 – H7130* Blanket bog (priority); • f1a6 – H7130 Blanket bog (non-priority); • f2b Purple moorgrass and rush pasture; • f2c Upland flushes, fens, and swamps; • f2c7 - 7230 Alkaline fens; • f2d Aquatic marginal vegetation; • r1 Standing open water; and • u1c Artificial unvegetated unsealed surface. Relevant ecological features considered to be of local authority/ Regional importance are as follows: • Ancient and native woodland; and • Blanket bog. All other habitats present (including groundwater dependent terrestrial ecosystems (GWDTE)) are considered to be of Local (at most) Importance. The following National Vegetation Classification (NVC) vegetation communities were identified within the Site and the wider survey area that are recognised as indicators that a habitat is likely to be highly or moderately groundwater dependant: Potentially highly groundwater dependent: • M6c; • M10a; • M23b; • W4; and • CG10.

Subject	Existing Condition
	Potentially moderately groundwater dependent: • M15a; • M15 and M15b; and • M25a and b. Highly unlikely to be groundwater dependent / low ecological value: • M15c; • M15*; and • M25*.
Protected / Notable Species	The following protected/notable species may be present on Site: • Bats; • Otter *Lutra lutra*; • Water vole *Arvicola amphibius*; • Red squirrel *Sciurus vulgaris*; • Pine marten *Martes martes*; • Adder *Vipera berus*; • Badger *Meles meles*; • Common reptiles and amphibians (excluding adder); • Fish; • Terrestrial invertebrates; and • Aquatic invertebrates. All protected / notable species listed above are considered to be of Local or Site Importance.
Ornithology	The Zone of Influence (ZoI) of the Site contains three statutory designated sites and one non-statutory site with ornithological interests. Potential adverse effects were only found for the non-statutory site (Corrimony RSPB Reserve), for which adverse effects during construction on black grouse *Lyrurus tetrix* within it might without mitigation be of Moderate significance. The desk study identified a range of bird species that could occur in the vicinity of the Site, and the field survey identified several notable bird species - these notable birds are: • Black grouse *Tetrao tetrix*; • Brambling *Fringilla montifringilla*; • Bullfinch *Pyrrhula pyrrhula*; • Common sandpiper *Actitis hypoleucos*; • Crested tit *Lophophanes cristatus*; • Crossbill *Loxia curvirostra*; • Cuckoo *Cuculus canorus*; • Curlew *Numenius arquata*; • Dunnock *Prunella modularis*; • Golden eagle *Aquila chrysaetos*; • Golden plover *Pluvialis apricaria*; • Grasshopper warbler *Locustella naevia*; • Greenfinch *Chloris chloris*; • Greenshank *Tringa nebularia*; • Kestrel *Falco tinnunculus*; • Lapwing *Vanellus vanellus*; • Lesser redpoll *Acanthis cabaret*; • Mistle thrush *Turdus viscivorus*;

Subject	Existing Condition
	• Osprey *Pandion haliaetus*; • Red kite *Milvus milvus*; • Redwing *Turdus iliacus*; • Reed bunting *Emberiza schoeniclus*; • Scottish crossbill *Loxia scotica*; • Siskin *Carduelis spinus*; • Skylark *Alauda arvensis*; • Snipe *Gallinago gallinago*; • Song Thrush *Turdus philomelos*; • Spotted flycatcher *Muscicapa striata*; • Starling *Sturnus vulgaris*; • Tree pipit *Anthus trivialis*; • Twite *Linaria flavirostris*; • Whinchat *Saxicola rubetra*; • Wood warbler *Phylloscopus sibilatrix*; and • Yellowhammer *Emberiza citronella.* Following an impact assessment for reasons set out in detail in the proposed Bingally substation EA Volume 1, Chapter 9 Ornithology the only bird species for which significant adverse effects were considered possible is black grouse. Adverse effects during construction, without mitigation, were considered to reach potentially Moderate significance. With black grouse mitigation in place and adhered to, all adverse effects are considered to be of Negligible significance.

4. RESTORATION AND DESIGN PRINCIPLES

4.1 Introduction

4.1.1 The landscape restoration has been designed to integrate landscape, ecology, and BNG requirements arising from site survey and analysis, the findings of the EAs, including the environmental commitments made by SSEN Transmission. The primary focus of the LHMP is to best assimilate the proposed Bingally substation and OHL tie in into the host landscape and habitats.

4.1.2 The landscape and habitat vision for the Site is to integrate the electrical infrastructure associated with the proposed Bingally substation and its immediate access tracks, and OHL tie in into a well concealed landscape, that seeks to maximise biodiversity and avoid undue consequences to the wider environmental fabric. Table 4-1 below sets out the specific restoration and design objectives.

Table 4-1 Schedule of Mitigation

Objective	Restoration Objective
Landscape and Visual Integration	The proposed substation site and proposed OHL tie-in is located in an area with existing plantation in the immediate vicinity which provides a small degree of enclosure and visual integration into the landscape setting. Landscape restoration should seek to protect the impression of natural character and take advantage of a transition from plantation forest to native woodland and peatland restoration. Visual integration opportunities are focussed on screening or filtering view of the proposed Bingally substation and proposed Bingally OHL tie in from views experienced from visual receptors to the southwest and west. The most pertinent areas to maintain and enhance visual integration include: • Screening views from visual receptors comprised of residential properties and core paths to the southwest and west of the Site. • Introduction of landscape elements to compensate for the presence of the proposed Bingally substation through the planting of Scots pine woodland, wet woodland, heathland, and a wet meadow seeding within the Site. This would help to improve the balance of coniferous woodland relative to the concentration of plantation forestry. • Integration of the proposed Bingally access track leading to the substation and Sustainable Drainage System (SuDS) ponds.
Biodiversity Net Gain	As noted above, the proposed Bingally Substation EA and proposed OHL Tie in EA recommended mitigation and enhancement measures pertaining to habitats in order to meet requirements of NPF4. This included completion of a BNG Assessment to ensure that the proposed Bingally substation and proposed OHL tie-in meets certain biodiversity objectives. SSEN Transmission have committed to delivering a 10% biodiversity net gain on all projects gaining consent and this is the target value for BNG for the proposed Bingally substation.
Habitats and protected species	In addition to achieving a 10% net gain in biodiversity,, the following further embedded and specific mitigation measures are detailed in the proposed Bingally Substation EA and proposed OHL Tie in EA in relation to habitats and protected species. These are key objectives when considering restoration and design principles: • The proposed Bingally substation access route makes use of and follows the existing access track, except where it passes through the outer northwestern part of Corrimony RSPB Reserve. By this means habitat losses have been kept to a minimum;

Objective	Restoration Objective
	• Permeable tracks will be constructed (via use of suitably sized material to maintain flows of surface / ground water, or via the use of culvert(s)) on tracks that directly or indirectly impact GWDTE; • A Construction Environment Management Plan (CEMP) would be produced, which will include details of pollution control measures during construction, as required by statutory authorities, and stipulating adherence to Scottish Environment Protection Agency (SEPA) Guidance on Pollution Prevention (GPP); • Construction runoff would be controlled as per an authorisation at the appropriate level (e.g. licence) granted by SEPA; • The design incorporates SuDS that would ensure runoff during operation is adequately controlled, according to industry best practice; • All oils, lubricants or other chemicals will be stored in an appropriate secure container in a suitable storage area, with spill kits provided at the storage location and at places across the Site; • In order to avoid pollution impacts to soils, vegetation and watercourses / waterbodies during construction, all refuelling and servicing of vehicles and plant will be conducted in a designated area which is bunded and has an impermeable base. This will be situated at least 50 m away from any watercourse; • All personnel involved in the construction and operation of the proposed Bingally substation will be made aware of the ecological features within the ZoI and the mitigation measures and working procedures that must be adopted. This will be achieved as part of the induction process and through the delivery of Toolbox Talks, where required; • An Ecological / Environmental Clerk of Works (ECoW / EnvCoW) will be employed for the duration of the construction of the Proposed Development; and • Works near or at any retained native trees or semi-natural woodland will follow guidance in British Standard 5837:2012 Trees in relation to design, demolition, and construction - Recommendations (British Standards Institution, 2012). Specific mitigation for reptiles will comprise: • Potential reptile hibernacula are avoided by works; • Construction works directly impacting potential reptile hibernacula (in localised areas within the northern section of the Site) to be outside the winter period; • ECoW supervised destruction and re-creation of potential hibernacula to be conducted (from mid-May to mid-September); and • Two-stage cutting / strimming of good quality reptile habitat is conducted (from mid-May to mid-September) prior to soil stripping. For full details of proposed embedded mitigation refer to the relevant proposed Bingally Substation EA Chapter(s).
Ornithology (specific mitigation measures)	This mitigation will be set out in greater detail in a black grouse Species Protection Plan (SPP); however, the basic measures will comprise the following: • Appointment of an ECoW; • Pre-construction survey by the ECoW, which is taken to mean black grouse survey including lek survey in the breeding season prior to construction (or during construction if deemed relevant); • If possible, construction works (such as upgrading of parts of the existing track) will be undertaken outside the breeding season; • Where construction works within 1 km of leks (as confirmed by the above pre-construction survey) cannot avoid the breeding season (and given that

Objective	Restoration Objective
	lek disturbance can potentially occur at up to 1 km), then the following will apply: • Such construction works will be restricted to start at least two hours after dawn in the lekking season, taken as March to mid-May, inclusive (black grouse leks are most active pre-dawn and shortly after dawn); • Where works will impact possible black grouse nesting habitat in the breeding season (in particular for the new section of track through the outer northwestern part of Corrimony RSPB Reserve), the ECoW will conduct checks for active black grouse nests in the vicinity of works. In the event that the ECoW identifies active black grouse nest(s) in the path of construction or close enough to likely be abandoned, the ECoW will establish an exclusion zone of appropriate size from which works, materials and entry will not be allowed until the ECoW judges that the breeding attempt(s) have finished. Note that this would be a legal requirement under the general protection of active nests of wild birds set out in the Wildlife and Countryside Act 1981 (as amended), regardless of the high conservation status of black grouse; • Passage of vehicular construction traffic (and pedestrian passage if relevant) past the leks in the breeding season will also be subject to the above morning time restriction; • The ECoW will monitor black grouse during the breeding season and may reduce the above distance of 1 km to a shorter distance if there is evidence of (for example) black grouse moving and lekking closer to the works without any apparent ill effect. The ECoW may also be able to reduce restrictions for passage of construction traffic past active leks within two hours of dawn if the ECoW finds that black grouse are approaching and lekking nearer the active access route without ill effect; and • Any vegetation removal / certain habitat management actions require to be conducted outside the nesting bird season (March to August, inclusive) to avoid impacts upon nesting birds.

4.2 Landscape and Habitat Proposals

4.2.1 The LHMP shown on Figure 4-1a and Figure 4-1b, Appendix A Figures, illustrates the spatial arrangement of the LHMP. These would be implemented. Key landscape elements and area is detailed in the table below.

Table 4-2 LHMP Elements

Proposed Element	Area / m2
Wet Woodland Planting	318,296
Peatland Seeding	100,464
Heathland Seeding	172,009
Scots Pine Woodland Planting	87,978
Wet Meadow Mix	25,426

4.2.2 Each habitat type which will be created as part of the LHMP must meet specific attributes to achieve the required 'condition' as set out in the BNG assessment. The table in Appendix B Post-Habitat Intervention Rationale, taken from the Biodiversity Net Gain Report (AECOM 2025[1]) sets out the rationale for condition of each additional post-intervention area-based habitat that will be created.

[1] AECOM, 2025. Bingally 400/132 kV Substation Biodiversity Net Gain Assessment Report.

4.2.3 The planting schedules detailed below have been designed to meet the necessary species compositions, and this combined with specific management requirements (see Section 5) will allow the proposed BNG conditions to be met.

Scots Pine Woodland Planting

4.2.4 Scots Pine Woodland Planting will comprise of native trees and shrubs, formed from transplants and selected container grown trees. Transplants to be planted at 1.5 m centres.

4.2.5 Function: Scots Pine Woodland Planting is proposed to enhance visual screening from visual receptors to the southwest and west of the Site boundary. Areas of Scots Pine Woodland Planting are also proposed along certain sections of the proposed Bingally substation access track where soil conditions are suitable. Scots Pine Woodland Planting would also aid landscape integration and habitat connectivity. The Planting Schedule is shown in Table 4-2 below.

Table 4-3 Woodland Planting Schedule

Scientific Name	Common Name	Size	Root Type	Height (cm)	Average Planting Centres / Density	Quantity	Mix
TREES							
Pinus sylvestris	Scots Pine	1+1	Bare Root	60-90	1500 mm cen	23,461	40%
Betula pubescens	Downy Birch	1+1	Bare Root	60-90	1500 mm cen	37,653	15%
Betula pendula	Silver Birch	1+1	Bare Root	60-90	1500 mm cen	30,123	10%
Sorbus aucuparia	Rowan	1+1	Bare Root	60-90	1500 mm cen	22,592	10%
SHRUBS							
Corylus avellana	Common Hazel	1+1	Bare Root	40-60	1500 mm cen	7,531	10%
Sambucus nigra	Black elder	1+1	Bare Root	40-60	1500 mm cen	7,531	10%

Wet Woodland Planting

4.2.6 Wet Woodland is proposed as a tree and shrub mix, formed from transplants. Transplants to be planted at 1.5 m centres.

4.2.7 Function: Wet woodland planting will support the transition from woodland and peatland restoration through creating habitat connectivity, improving drainage, and providing visual screening from the eastern side, allowing it to integrate into the existing landscape. Trees will be managed to achieve their maximum mature height for the species. The Planting Schedule is shown in Table 4-4 below.

Table 4-4 Wet Woodland Planting Schedule

Scientific Name	Common Name	Size	Root Type	Height (cm)	Average Planting Centres/ Density	Quantity	Mix
TREES							
Alnus glutinosa	Common Alder	1+1	Bare Root	60-90	1500 mm cen	3,859	20%
Betula pubescens	Downy Birch	1+1	Bare Root	60-90	1500 mm cen	3,859	20%
Salix cinerea	Grey Willow	1+1	Bare Root	60-90	1500mm cen	3,859	20%
Salix caprea	Goat Willow	1+1	Bare Root	60-90	1500mm cen	3,859	20%

Scientific Name	Common Name	Size	Root Type	Height (cm)	Average Planting Centres/ Density	Quantity	Mix
SHRUBS							
Corylus avellana	Common Hazel	1+1	Bare Root	40-60	1500mm cen	3,859	20%

Wet Meadow Mix

4.2.8 Wet Meadow Planting is proposed along the SuDS pond areas as a mixture of wildflower and grass seed mix. This can be hydro-seeded and/or sown by hand at a rate of 3g/m2. Depending on each method, seeds must be planted at the optimal depth for germination to give a uniform appearance.

4.2.9 Function: Wet Meadow Planting will be used to seed the area around the SuDS pond where water levels will vary. This mix will aid with the drainage function as well as soften the transition to the surrounding woodland planting. Wet meadow seeding around the SuDS pond increases species biodiversity and creates a buffer zone improving water quality whilst building a defined character around the pond. The Wet Meadow Mix Planting Schedule is shown in the table below.

Table 4-5 Wet Meadow Mix Planting Schedule

Species	Common Name	Planting Method	Sowing Rate	% Mix
WILDFLOWERS				**20%**
Achillea ptarmica	Sneezewort	Hydro-seeded and/or sown as entire mix	3g/m2	2
Centaurea nigra	Common Knapweed			2.25
Cirsium palustre	Marsh Thistle			0.1
Filipendula ulmaria	Meadowsweet			2.5
Geranium pratense	Meadow Cranesbill			0.5
Geum rivale	Water Avens			0.5
Hypericum tetrapterum	Square-stemmed St John's Wort			0.5
Hypochaeris radicata	Cat's Ear			0.5
Iris pseudacorus	Yellow Flag Iris			1
Leucanthemum vulgare	Ox-eye Daisy			1.5
Lotus uliginosus	Greater Trefoil			0.1
Plantago lanceolata	Ribwort Plantain			1.5
Prunella vulgaris	Selfheal			1
Ranunculus acris	Meadow Buttercup			1
Rhinanthus minor	Yellow Rattle			1
Rumex acetosa	Common Sorrel			1
Scorzoneroides autumnalis	Autumn Hawkbit			1
Silene flos-cuculi	Ragged Robin			1.5
Succisa pratensis	Devil's-bit Scabious			0.5
GRASSES				**80%**
Agrostis capillaris	Common Bent (c)	Hand sown as entire mix	3g/m2	10
Alopecurus pratensis	Meadow Foxtail (c)			5
Carex ovalis	Oval Sedge			0.05
Deschampsia caespitosa	Tufted Hair Grass			7.6
Festuca rubra commutata	Chewing's Fescue (c)			36.5
Poa pratensis	Smooth-stalked Meadow Grass (c)			20.9

Heathland Seeding

4.2.10 Heathland seeding is proposed along the proposed Bingally substation access track within the Site. This is proposed as a bespoke seed mix informed by site conditions and specialist ecologists.

4.2.11 Function: Establishing a diverse sward of heathland surrounding the proposed Bingally substation and access track buffers the woodland planting, its low height adds structure to the landscape ensuring the woodland planting integrates seamlessly into the landscape and habitat compensation.

4.2.12 The indicative Planting Schedule is shown in Table 4-6 below.

Table 4-6 Heathland Schedule

Scientific Name	Common Name	Planting Method	Sowing Rate	Mix
SEEDED SPECIES				
Calluna vulgaris	Heather	Hydro-seeded	3 g/m2	20%
Empetrum nigrum	Crowberry			10%
Erica cinerea	Bell heather			10%
Erica tetralix	Cross-leaved heath			10%
Eriophorum angustifolium	Common cottongrass			10%
Eriophorum vaginatum	Hare's-tail cottongrass			10%
Juncus squarrosus	Heath rush			10%
Vaccinium myrtillus	Bilberry			10%
Vaccinium vitis-idaea	Cowberry			10%

Peatland Restoration

4.2.13 Peatland restoration is proposed along areas where earthworks will occur within the Site. This is proposed as a seed mix informed by site conditions and specialist ecologists.

4.2.14 Function: Restore disturbed peatland by re-establishing a diverse seed mix into the surrounding peatland. Areas around the access track help buffer the woodland planting and its low height adds structure to the landscape ensuring the woodland planting integrates seamlessly into the landscape and habitat compensation. Peatland restoration is likely to result in net carbon capture.

4.2.15 The indicative Planting Schedule is shown in Table 4-7 below.

Table 4-7 Peatland Schedule

Scientific Name	Common Name	Planting Method	Sowing Rate	Mix
SEEDED SPECIES				
Calluna vulgaris	Heather	Hydro-seeded	3 g/m2	20%
Empetrum nigrum	Crowberry			10%
Erica cinerea	Bell heather			10%
Erica tetralix	Cross-leaved heath			10%
Eriophorum angustifolium	Common cottongrass			10%
Eriophorum vaginatum	Hare's-tail cottongrass			10%
Juncus squarrosus	Heath rush			10%
Vaccinium myrtillus	Bilberry			10%
Vaccinium vitis-idaea	Cowberry			10%

5. MAINTENANCE AND MANAGEMENT

5.1 Introduction

5.1.1 This section:

- Describes the key roles and responsibilities
- Describes the key ecological issues associated with construction and operation of the proposed Bingally substation and proposed OHL tie in; and
- Presents the proposed survey methods that will be used to generate ecological baseline information.

5.2 Overview of Roles and Key Environmental Responsibilities

5.2.1 The Principal Contractor team will be responsible for implementing the landscape and ecology measures during construction. They will also be responsible for the establishment of maintenance and monitoring based on more detailed landscape specification for a five-year period following construction, unless otherwise agreed with SSEN Transmission.

5.2.2 The Biodiversity Net Gain Reports (AECOM 2025[2] and AECOM 2025[3]) details the monitoring and maintenance requirements including roles and responsibilities in the first five years following construction, and an up to 30-year period for the purpose of complying with the relevant SSEN Biodiversity project toolkit and technical Guidance, with cognisance of the target condition status. These monitoring and maintenance requirements are summarised below for each general habitat type to be created.

5.2.3 During the construction phase, it will be ensured that all relevant policies, procedures, and their requirements are made known to site personnel. This will be undertaken through several methods including site inductions, Work Package Plans (otherwise known as method statements), Task Briefing Sheets (task specific method statement and risk assessment), risk assessment briefings, and toolbox talks.

5.2.4 Staff, operatives, and subcontractors have the authority and responsibility to protect the environment at all times during execution of the works; the responsibilities outlined in this section will be highlighted during the site briefing. All personnel will be trained in the necessary skills to fulfil their role.

5.2.5 Key personnel for specific job roles are set out in Table 5-1. The roles outlined may be substituted as required providing that the key environmental responsibilities are clearly and appropriately allocated.

Table 5-1 Schedule of Mitigation

Role	Responsibility
Environment and Sustainability Manager	• Maintaining and revising any environmental procedures that are required; • All measures in the LHMP are implemented on site. This includes ensuring that adequate resources are allocated to environmental management on site; • Ensuring all measures to protect retained vegetation are implemented on site; • Reviews and approves risk assessments and Work Package Plans (RAMS) for environmental content; • Appointing Environmental Specialists where required;

[2] AECOM, 2025. Bingally 400/ 132kV Substation Biodiversity Net Gain Assessment Report.
[3] AECOM, 2025. Bingally 400 kV OHL Tie-In Biodiversity Net Gain Assessment Report.

Role	Responsibility
	• Ensuring environmental issues in risk assessments are communicated effectively on site and that appropriate training is delivered; • Ensuring that any mitigation measures identified in this LHMP but not covered by a Protected Species Licence will be implemented on site; and • Ensuring environmental instructions (including any Key Performance Indicators) from the client are conducted.
Environmental Clerk of Works (ECoW)	• The scope of the ECoW would be advised by the Project Ecologist and landscape architect based on relevant environmental commitments, the findings of the pre-commencement walkovers, protected species licensing requirements, presence of Invasive Non-native Species (INNS) and with reference to the relevant project programmes; and • Relevant site staff would receive toolbox talks as necessary from the ECoW on the relevant ecological risks present, legal requirements, and the working requirements necessary to comply with legislation, and the final approved landscaping and biodiversity management and enhancement measures. Toolbox talks would be repeated as necessary over the duration of the works.
Project Ecologist	• Appointed by Principal Contractor; • A Project Ecologist will be employed for the duration of construction, including implementation of the LHMP. This role may be combined with that of the Ecological / Environmental Clerk of Works (ECoW / EnvCoW); • The ECoW / EnvCoW will advise on and monitor implementation of mitigation measures and compliance with legislation concerning ecological features, including those relevant to the LHMP; • These measures may include conducting pre-works surveys for relevant protected species in suitable habitat, including otter, water vole, badger, red squirrel. and pine marten. In line with NatureScot guidance, the pre-construction surveys will take place no more than three months before commencing works (including facilitating works such as vegetation clearance; and • The ECoW / EnvCoW will be responsible for overseeing habitat mitigation works to ensure these align with this LHMP and the overarching BNG assessment. • The contractor team will be responsible for implementing the landscape and ecology measures during construction. They will also be responsible for establishing, managing, and monitoring the implementation and establishment of the landscape and ecological measures outlined within this document within the five-year monitoring and maintenance period for establishment.
Landscape Architect	• Monitoring and assessing the landscape related elements of the detailed LHMP for their effectiveness on an annual basis for the first five years following the completion of the development; • The LHMP and specification, shall be developed accordingly to suit any changing landscape conditions and ultimately inform the maintenance operations associated with the development throughout the operational life of the proposed Bingally substation and proposed Bingally OHL Tie-in; • Ensuring that any reviews associated with landscape related elements of the LHMP clearly identifies any changes to site conditions and circumstances, whether the aims and objectives of the approved LHMP are being met, and where identified changes are needed to existing management practices and time frames. This is the responsibility of a landscape architect for the 5-year period from completion of construction.
SSEN Operations Team	• The LHMP and specification, shall be developed accordingly to suit any changing landscape conditions and ultimately inform the maintenance operations associated with the development throughout the operational life of the proposed Bingally substation and proposed Bingally OHL Tie-in; • Ensuring that any reviews associated with landscape related elements of the LHMP clearly identifies any changes to site conditions and circumstances, whether the

Role	Responsibility
	aims and objectives of the approved LHMP are being met, and where identified changes are needed to existing management practices and time frames. This is the responsibility of a landscape architect for the 5-year period from completion of construction.

5.3 Soft landscape monitoring and management objectives

General management and monitoring objectives

5.3.1 Soft landscape management across the Site will be achieved through implementing general objectives to maximise the biodiversity value on site, specifically including:

- Applying good horticultural and ecological practice to all operations. Horticultural practice will include the use of peat-free composts, biodegradable mulches, and soil conditioners where practicable. The use of pesticides (insecticides, fungicides, and slug pellets), appropriate herbicides (non-residual (glyphosate-free)) and chemical fertilisers will be discouraged, and any weed removal will be undertaken by hand where practicable;
- Promoting healthy growth and establishment of plants;
- Ensuring consistent control of invasive weeds;
- Ensuring development of optimum plant form, shape, and planting density;
- Providing protection against pests and diseases;
- Promoting wildlife value and species diversity where appropriate;
- Ensuring planting is managed to maintain its function to provide landscape integration, nature and biodiversity value, connectivity for the benefit of wildlife, visual amenity, and elements of visual screening;
- Ensuring the new landscape reflects the local landscape character and is in keeping the surrounding area;
- Ensuring long term commitment to replacement of defective plant material;
- Reviewing opportunities for introduction of new species or replacement of exhausted species where appropriate, in line with original design intentions;
- Managing planting to ensure clear forward visibility is maintained along transport and pedestrian access routes;
- Ensuring that all areas of hard surfacing are left in a clean condition, free from any soil, mud, leaves, cuttings, and plant arisings; and
- Ensuring that the works themselves do not cause inconvenience or danger to users.
- All habitat creation measures will be initiated during construction of the Proposed Development and then managed as set out above to ensure the proposed target conditions (as set in the BNG assessment) are met.
- Monitoring will be undertaken in years 1, 2, 3, 5, 10, 15 and 20 to check on progress towards achieving the targeted conditions. Further monitoring of peatland and Scots Pine woodland maybe required through to year 30, the requirement for this will be determined following the review of the data from the monitoring survey in year 20. If target condition is reached by year 20 no further monitoring would be required. The monitoring should follow the habitat condition assessment methodology[4] to check progress, where progress towards the target condition is not on track, remedial measures will be recommended.

5.3.2 For certain habitats, to meet the objectives set out in the BNG assessment, specific management requirements are necessary in addition to those general measures outlined above. These are detailed below for each created habitat type:

Other Scots Pine Woodland / Wet Woodland

5.3.3 Planting will simulate a more natural woodland, including open glades, and planting the trees in clusters. Whilst woodland habitat only needs 25-30% tree cover to be considered 'woodland' a mature canopy cover of 75% is the target.

5.3.4 To ensure successful woodland establishment the monitoring of planted tree health and removal of Sitka spruce seedlings must be conducted for at least the first three years and potentially up to five years. Site inspection for browsing damage then should be undertaken annually up to the preparation of the successor woodland management plan (after ten years). Two layers of herbivore protection will be installed. All tree / shrub planting will have individual tree protectors / sleeves (for small to medium-sized herbivores, such as vole *Myodes glareolus* / *Microtus agrestis* species and brown hare *Lepus europaeus*) with deer fencing surrounding the wider block(s).

Upland Heathland

5.3.5 Heathland creation should include regular monitoring and removal of tree/scrub seedlings over a suitable period (e.g. in years 3, 5, 10, 15 and 20). Monitoring should be undertaken following the Habitat Condition Assessment criteria to ensure that the targeted condition of moderate is reached. Areas of heathland creation will require an initial ground preparation, such as scraping / smoothing and will require rotational brush cutting to improve diversity of sward height, if the habitat is to meet Moderate Condition.

Peatland Restoration

5.3.6 As noted above, the following general mitigation measures will be implemented to reduce impacts on peat:

- Prioritise avoiding loss or other impacts on peatlands (e.g. bog and heathland habitats). Consideration should be given to a) minimising the impacts on these habitats; and b) compensation by on- or off-Site enhancement of other bog and heathland habitats to achieve an overall biodiversity net gain;
- Avoid deep peat in general – deep peat is highly likely to be present in areas of blanket bog; and
- All soil stripping / peat excavation and storage to follow a process of soil management to ensure the protection of turfs and soil horizons, allowing for successful reinstatement and revegetation.

5.3.7 Further ecological enhancement will include peatland restoration conducted in suitable locations around the proposed Bingally substation platform, for 30 years (including a five year period of monitoring for vegetation establishment). Peatland habitats in this area have been badly disturbed by former forestry operations, leaving the land heavily ridged and drained. Good condition for blanket bog could be met through interventions using recognised best practice techniques, e.g. smoothing and / or drainage channel blocking (which would likely make use of excess peat won from the proposed substation platform area) to bring the water table at/near the bog surface all year, with ongoing maintenance of tree / scrub clearance.

APPENDIX A FIGURES

Figure 2-1 Site Location Plan

Figure 4-1a Landscape and Habitat Restoration Plan

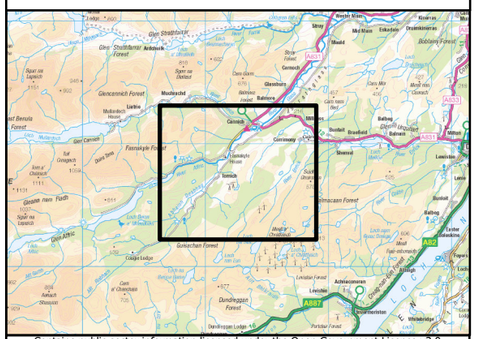
Figure 4-1b Landscape and Habitat Restoration Plan Wider Context

Scottish & Southern Electricity Networks

TRANSMISSION

Legend

Proposed Development Site



Project No: LT000521

Project: Bingally Substation and OHL Upgrades

Title:

Site Location Plan

Drawn by: JBARR Date: 27/03/2025

Drawing: Figure 2-1

Project Management Initials: DesignerLDW | Checked:JS | Approved:JS | ISO A1 594mm x 841mm

General Landscape Strategy:

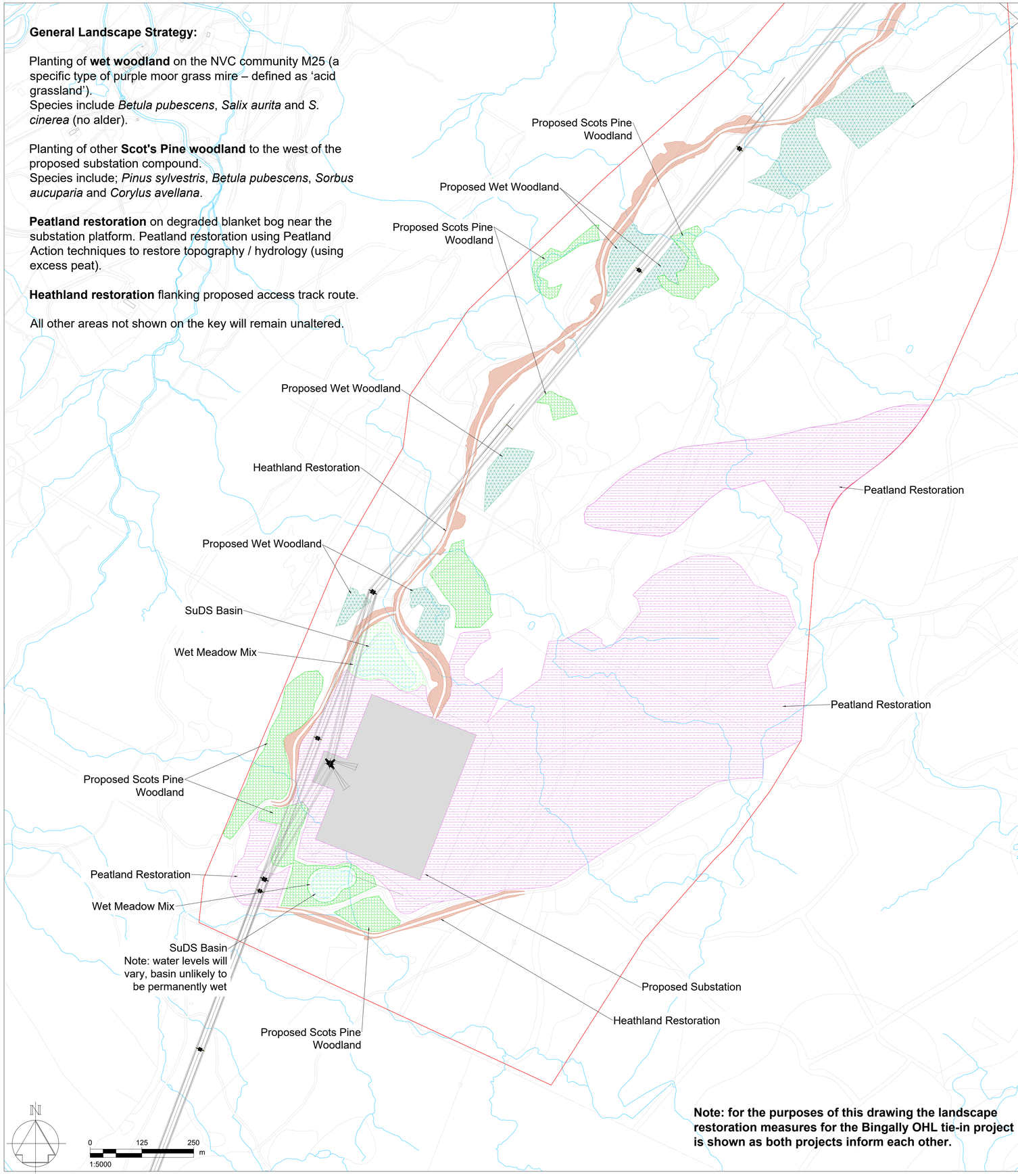
Planting of **wet woodland** on the NVC community M25 (a specific type of purple moor grass mire – defined as 'acid grassland').
Species include *Betula pubescens*, *Salix aurita* and *S. cinerea* (no alder).

Planting of other **Scot's Pine woodland** to the west of the proposed substation compound.
Species include; *Pinus sylvestris*, *Betula pubescens*, *Sorbus aucuparia* and *Corylus avellana*.

Peatland restoration on degraded blanket bog near the substation platform. Peatland restoration using Peatland Action techniques to restore topography / hydrology (using excess peat).

Heathland restoration flanking proposed access track route.

All other areas not shown on the key will remain unaltered.



Note: for the purposes of this drawing the landscape restoration measures for the Bingally OHL tie-in project is shown as both projects inform each other.

Wet Meadow Mix				
Species	**Common Name**	**Planting Method**	**Sowing Rate**	**% Mix**
WILDFLOWERS				**20%**
Achillea ptarmica	Sneezewort	Hand sown as entire mix	3g/m2	2
Centaurea nigra	Common Knapweed			2.25
Cirsium palustre	Marsh Thistle			0.1
Filipendula ulmaria	Meadowsweet			2.5
Geranium pratense	Meadow Cranesbill			0.5
Geum rivale	Water Avens			0.5
Hypericum tetrapterum	Square-stemmed St John's Wort			0.5
Hypochaeris radicata	Cat's Ear			0.5
Iris pseudacorus	Yellow Flag Iris			1
Leucanthemum vulgare	Ox-eye Daisy			1.5
Lotus uliginosus	Greater Trefoil			0.1
Plantago lanceolata	Ribwort Plantain			1.5
Prunella vulgaris	Selfheal			1
Ranunculus acris	Meadow Buttercup			1
Rhinanthus minor	Yellow Rattle			1
Rumex acetosa	Common Sorrel			1
Scorzoneroides autumnalis	Autumn Hawkbit			1
Silene flos-cuculi	Ragged Robin			1.5
Succisa pratensis	Devil's-bit Scabious			0.5
GRASSES				**80%**
Agrostis capillaris	Common Bent (c)	Hand sown as entire mix	3g/m2	10
Alopecurus pratensis	Meadow Foxtail (c)			5
Carex ovalis	Oval Sedge			0.05
Deschampsia caespitosa	Tufted Hair Grass			7.6
Festuca rubra commutata	Chewing's Fescue (c)			36.5
Poa pratensis	Smooth-stalked Meadow Grass (c)			20.9
General Notes:	1. SCM2 Wet Meadow Mix to be sown by hand at a rate of 3g/m2.			
			Sqm	
	Total Area for Mix is		**25,426**	

Peatland Seeding Mix				
Species	**Common Name**	**Planting Method**	**Sowing Rate**	**% Mix**
SEEDED SPECIES				**100%**
Calluna vulgaris	Heather	Hydro-seeded	3g/m2	20%
Empetrum nigrum	Crowberry			10%
Erica cinerea	Bell heather			10%
Erica tetralix	Cross-leaved heath			10%
Eriophorum angustifolium	Common cotton-grass			10%
Eriophorum vaginatum	Hare's-tail cottongrass			10%
Juncus squarrosus	Heath rush			10%
Vaccinium myrtillus	Bilberry			10%
Vaccinium vitisidae	Cowberry			10%
General Notes:	1. Heathland mix to be hydro-seeded at a rate of 3g/m2.			
			Sqm	
	Total Area for Mix is		**100,464**	

Heathland Mix				
Species	**Common Name**	**Planting Method**	**Sowing Rate**	**% Mix**
SEEDED SPECIES				**100%**
Calluna vulgaris	Heather or ling	Hydro-seeded	3g/m2	20%
Empetrum nigrum	Crowberry			10%
Erica cinerea	Bell heather			10%
Erica tetralix	Cross-leaved heath			10%
Eriophorum angustifolium	Common cotton-grass			10%
Eriophorum vaginatum	Hare's-tail cottongrass			10%
Juncus squarrosus	Heath rush			10%
Vaccinium myrtillus	Bilberry			10%
Vaccinium vitisidae	Cowberry			10%
General Notes:	1. Heathland mix to be hydro-seeded at a rate of 3g/m2.			
			Sqm	
	Total Area for Mix is		**172,009**	

Wet Woodland Mix						
Species	**Designation**	**Root Type**	**Height CM**	**Average Planting Centres / Density**	**QTY**	**% Mix**
TREES						**80%**
Alnus glutinosa	1+1	Bare Root	60-90	1500mm cen	42439	20%
Betula pubescens	1+1	Bare Root	60-90	1500mm cen	42439	20%
Salix cinerea	1+1	Bare Root	60-90	1500mm cen	42439	20%
Salix caprea	1+1	Bare Root	60-90	1500mm cen	42439	20%
SHRUBS-						**20%**
Corylus avellana	1+1	Bare Root	40-60	1500mm cen	42439	20%
					Sqm	
	Total Area for Mix is				**318,296**	

Scots Pine Woodland Mix						
Species	**Designation**	**Root Type**	**Height CM**	**Average Planting Centres / Density**	**QTY**	**% Mix**
TREES						**80%**
Pinus sylvestris	1+1	Bare Root	60-90	1500mm cen	23461	40%
Betula pubescens	1+1	Bare Root	60-90	1500mm cen	8798	15%
Betula pendula	1+1	Bare Root	60-90	1500mm cen	5865	10%
Sorbus aucuparia	1+1	Bare Root	60-90	1500mm cen	5865	10%
SHRUBS-						**20%**
Corylus avellana	1+1	Bare Root	40-60	1500mm cen	5865	10%
Sambucus nigra	1+1	Bare Root	40-60	1500mm cen	5865	10%
					Sqm	
	Total Area for Mix is				**87,978**	

AECOM

PROJECT

Bingally Substation

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GENERAL NOTES

The landscape plan is to be finalised upon the completion of NVC ecology survey. All information in the existing drawing is based upon the draft findings of the survey.

LEGEND

- Site Boundary
- Proposed Wet Woodland
- Peatland Restoration
- Heathland Restoration
- Proposed Other Scot's Pine Woodland
- SUDS Pond
- Wet Meadow Mix

ISSUE/REVISION

P05	20/02/25	OHL XREF ADDED
P04	14/02/25	EDIT TO PEATLAND HATCH
P03	13/02/25	FURTHER EDIT TO MITIGATIO
P02	12/02/25	FURTHER EDIT TO MITIGATIO
P01	17/07/24	DRAFT ISSUE
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60701792

SHEET TITLE

LANDSCAPE RESTORATION PLAN

SHEET NUMBER

60701792-ACM-ELS-S1-Z_Z_Z_DR-LA-0001

Project Management Initials: DesignerLDW | Checked:JS | Approved:JS | ISO A1 594mm x 841mm

General Landscape Strategy:

Planting of **wet woodland** on the NVC community M25 (a specific type of purple moor grass mire – defined as 'acid grassland').
Species include *Betula pubescens*, *Salix aurita* and *S. cinerea* (no alder).

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Peatland restoration on degraded blanket bog near the substation platform. Peatland restoration using Peatland Action techniques to restore topography / hydrology (using excess peat).

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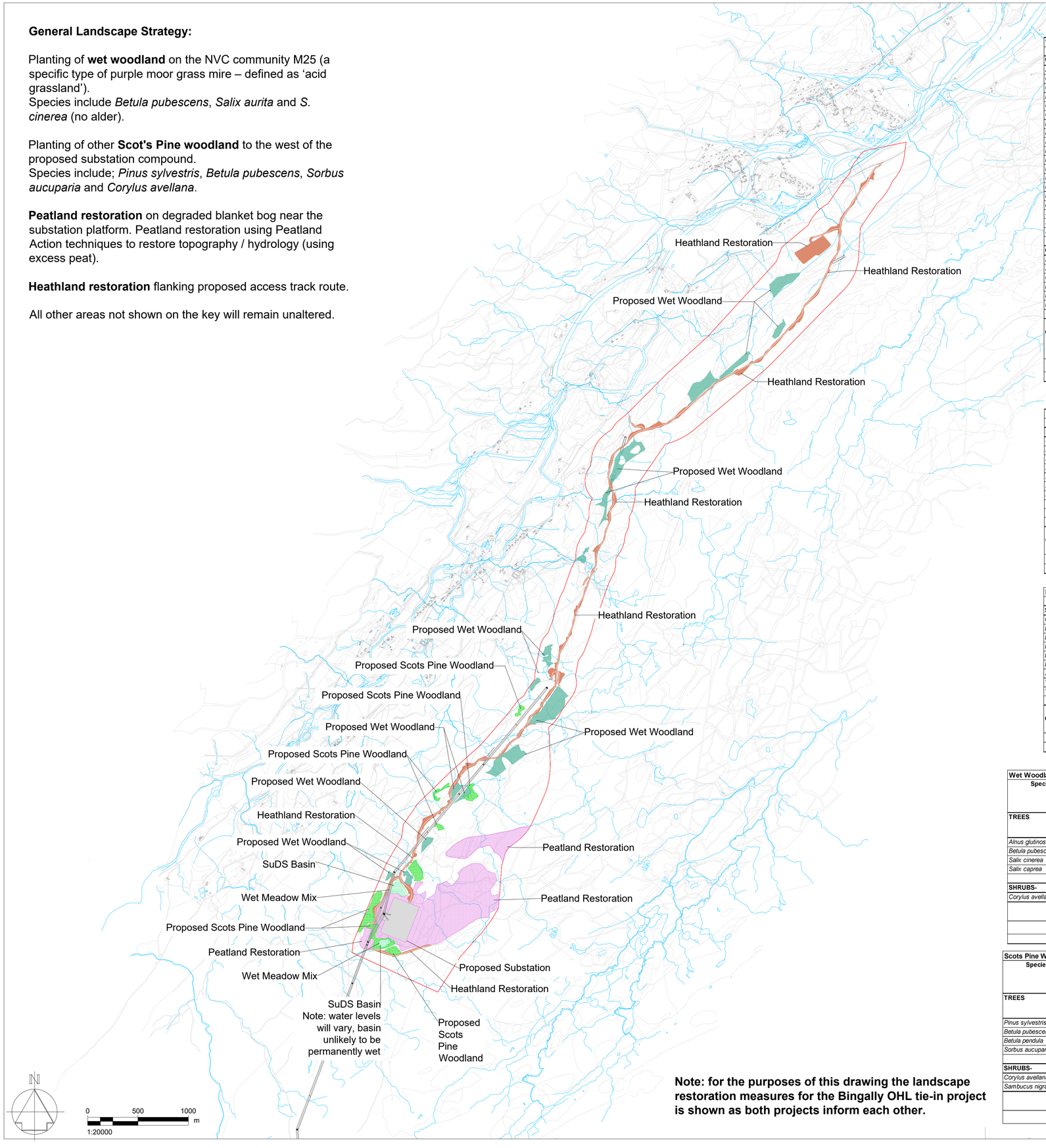

Note: for the purposes of this drawing the landscape restoration measures for the Bingally OHL tie-in project is shown as both projects inform each other.

Wet Meadow Mix (SCM2)				
Species	**Common Name**	**Planting Method**	**Sowing Rate**	**% Mix**
WILDFLOWERS				**20%**
Achillea ptarmica	Sneezewort	Hand sown as entire mix	3g/m2	2
Centaurea nigra	Common Knapweed			2.25
Cirsium palustre	Marsh Thistle			0.1
Filipendula ulmaria	Meadowsweet			2.5
Geranium pratense	Meadow Cranesbill			0.5
Geum rivale	Water Avens			0.5
Hypericum tetrapterum	Square-stemmed St John's Wort			0.5
Hypochaeris radicata	Cat's Ear			0.5
Iris pseudacorus	Yellow Flag Iris			1
Leucanthemum vulgare	Ox-eye Daisy			1.5
Lotus uliginosus	Greater Trefoil			0.1
Plantago lanceolata	Ribwort Plantain			1.5
Prunella vulgaris	Selfheal			1
Ranunculus acris	Meadow Buttercup			1
Rhinanthus minor	Yellow Rattle			1
Rumex acetosa	Common Sorrel			1
Scorzoneroides autumnalis	Autumn Hawkbit			1
Silene flos-cuculi	Ragged Robin			1.5
Succisa pratensis	Devil's-bit Scabious			0.5
GRASSES				**80%**
Agrostis capillaris	Common Bent (c)	Hand sown as entire mix	3g/m2	10
Alopecurus pratensis	Meadow Foxtail (c)			5
Carex ovalis	Oval Sedge			0.05
Deschampsia caespitosa	Tufted Hair Grass			7.6
Festuca rubra commutata	Chewing's Fescue (c)			36.5
Poa pratensis	Smooth-stalked Meadow Grass (c)			20.9
General Notes:	1. SCM2 Wet Meadow Mix to be sown by hand at a rate of 3g/m2.			
			Sqm	
	Total Area for Mix is		**25,426**	

Peatland Seeding Mix				
Species	**Common Name**	**Planting Method**	**Sowing Rate**	**% Mix**
SEEDED SPECIES				**100%**
Calluna vulgaris	Heather	Hydro-seeded	3g/m2	20%
Empetrum nigrum	Crowberry			10%
Erica cinerea	Bell heather			10%
Erica tetralix	Cross-leaved heath			10%
Eriophorum angustifolium	Common cotton-grass			10%
Eriophorum vaginatum	Hare's-tail cottongrass			10%
Juncus squarrosus	Heath rush			10%
Vaccinium myrtillus	Bilberry			10%
Vaccinium vitisidae	Cowberry			10%
General Notes:	1. Heathland mix to be hydro-seeded at a rate of 3g/m2.			
			Sqm	
	Total Area for Mix is		**100,464**	

Heathland Mix				
Species	**Common Name**	**Planting Method**	**Sowing Rate**	**% Mix**
SEEDED SPECIES				**100%**
Calluna vulgaris	Heather or ling	Hydro-seeded	3g/m2	20%
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Juncus squarrosus	Heath rush			10%
Vaccinium myrtillus	Bilberry			10%
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General Notes:	1. Heathland mix to be hydro-seeded at a rate of 3g/m2.			
			Sqm	
	Total Area for Mix is		**172,009**	

Wet Woodland Mix						
Species	**Designation**	**Root Type**	**Height CM**	**Average Planting Centres / Density**	**QTY**	**% Mix**
TREES						**80%**
Alnus glutinosa	1+1	Bare Root	60-90	1500mm cen	42439	20%
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Salix caprea	1+1	Bare Root	60-90	1500mm cen	42439	20%
SHRUBS-						**20%**
Corylus avellana	1+1	Bare Root	40-60	1500mm cen	42439	20%
				Sqm		
	Total Area for Mix is			**318,296**		

Scots Pine Woodland Mix						
Species	**Designation**	**Root Type**	**Height CM**	**Average Planting Centres / Density**	**QTY**	**% Mix**
TREES						**80%**
Pinus sylvestris	1+1	Bare Root	60-90	1500mm cen	23461	40%
Betula pubescens	1+1	Bare Root	60-90	1500mm cen	8798	15%
Betula pendula	1+1	Bare Root	60-90	1500mm cen	5865	10%
Sorbus aucuparia	1+1	Bare Root	60-90	1500mm cen	5865	10%
SHRUBS-						**20%**
Corylus avellana	1+1	Bare Root	40-60	1500mm cen	5865	10%
Sambucus nigra	1+1	Bare Root	40-60	1500mm cen	5865	10%
				Sqm		
	Total Area for Mix is			**87,978**		

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GENERAL NOTES

The landscape plan is to be finalised upon the completion of NVC ecology survey. All information in the existing drawing is based upon the draft findings of the survey.

LEGEND

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ISSUE/REVISION

P05	20/02/25	OHL XREF ADDED
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APPENDIX B POST-HABITAT INTERVENTION RATIONALE

Rationale for condition of each additional post-intervention area-based habitat that will be created.

General LHMP habitat	UKHab type	Target condition	Rationale / Description
Wet woodland mix	w1d	Moderate	Woodland comprising a mix of native species. After 15 years (up to 30 years) expected to be semi-mature birch *Betula* spp./rowan *Sorbus aucuparia* with a grassy ground flora of acid species or a heathy ground flora dominated by dwarf shrubs. Moderate condition met through good diversity/cover of native tree species and controlling the extent and spread of Sitka spruce. The habitat fails to meet Good condition due to criteria that could only be met in long-established or ancient woodland.
Woodland mix	w1g Other Broadleaved Woodland	Moderate	Woodland comprising a mix of native species. After 15 years (up to 30 years) expected to be semi-mature birch *Betula* spp./rowan *Sorbus aucuparia* / with a grassy ground flora of acid species or a heathy ground flora dominated by dwarf shrubs. Moderate condition met through good diversity/cover of native tree species and controlling the extent and spread of Sitka spruce. The habitat fails to meet Good condition due to criteria that could only be met in long-established or ancient woodland.
Wet meadow mix	g3c Other Neutral Grassland	Moderate	Grassland comprising a mix of native species (e.g. wet meadow seed mix). No management is intended, however, so some species would not persist and hence the habitat aimed for is Other Neutral Grassland. Likely to fail on bare ground/undesirable species criteria, but would still achieve Moderate condition due to species richness greater than 9 per sq. m.
Heathland mix	h1b Upland Heathland	Moderate	Dominated by heather with one or more dwarf shrubs (e.g. bilberry *Vaccinium myrtillus*). Meets all condition criteria but fails to meet Good condition due to lack of structural diversity and age classes of heather.
Heathland mix with dwarf shrub planting	h1b Upland Heathland	Moderate	Dominated by heather with one or more dwarf shrubs (e.g. bilberry). Meets all condition criteria but fails to meet Good condition due to lack of structural diversity and age classes of heather.
Peatland restoration (Blanket bog)	f1a5 Blanket bog (priority)	Good	Water table at / near surface all year, no artificial drainage. Water quality good - low turbidity and no obvious pollution. Scrub/tree <10% cover. Bare ground <5% cover. INNS absent. Peat bog indicator species (Sphagnum *Sphagnum* spp. / cottongrass *Eriophorum* spp.) at least frequent, AND combined cover of ericoid dwarf-shrubs <75%. For Poor condition blanket bog around the Sites to achieve Good condition, favourable hydrological conditions must be restored. Following this, it is

General LHMP habitat	UKHab type	Target condition	Rationale / Description
			reasonable to assume the successful promotion of peat bog indicator species (from occasional to frequent) and reduced cover of ericoid shrubs (which seldom exceed 75% cover), will both occur within the expected time frame of ten years.
Peatland restoration (Heathland)	h1b Upland Heathland	Moderate	Dominated by heather with one or more dwarf shrubs (e.g. bilberry). Meets all condition criteria but fails to meet Good condition due to lack of structural diversity and age classes of heather.