Scottish & Southern Electricity Networks

TRANSMISSION

VOLUME 4: APPENDIX V5-7.2: OUTLINE PEAT MANAGEMENT PLAN (PMP) – ALTERNATIVE ALIGNMENT

Strathy South Wind Farm Grid Connection

Volume 4: Appendix V5-7.2: Stage 1 Outline Peat Management Plan – Alternative Alignment

SSEN Transmission

Prepared by:

SLR Consulting Limited

No. 50 Stirling Business Centre, Wellgreen, Stirling,
FK8 2DZ

SLR Project No.: 428.013137.00001_04

5 February 2025

Revision: Final

Making Sustainability Happen

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
Final	5 February 2025	R. Watson	A. Huntridge	G.Robb

Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with SSEN Transmission (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

Table of Contents

Tables in Text

Figures

Annexes

1.0 Introduction

1.1 General

SLR Consulting Ltd (SLR) was commissioned by ASH design+assessment Ltd. on behalf of Scottish and Southern Electricity Networks (SSEN) Transmission to prepare a Stage 1 Outline Peat Management Plan (PMP) for the proposed Strathy South Wind Farm Grid Connection (the “Proposed Development”).

This Outline Peat Management Plan (PMP) considers the Proposed Development with the Alternative Alignment (hereafter referred to as ‘the Alternative Alignment’), which is located approximately 1.0 km south-west of Melvich, Sutherland, Scotland, see **Figure V5-7.2.1**.

The work has been undertaken by a team of Geotechnical Engineers and Geologists, with over 10 years’ experience in undertaking peat assessments. The team was led by a Fellow of the Chartered Institution of Water and Environmental Management (CIWEM) and Chartered Water and Environment Manager, with more than 30 years’ consultancy experience and specialising in the assessment of soils, geology and water for renewable power and infrastructure projects in Scotland.

1.2 The Alternative Alignment

The Alternative Alignment would comprise the construction and operation of a 132 kV double circuit overhead line (OHL) supported by steel lattice towers from Strathy North ‘T’ (near Dallangwell) to a new cable sealing end (CSE) compound, prior to connecting into Connagill 275/132 kV substation via two short sections of single circuit 132 kV underground cable (UGC), as shown on **Figure V5-7.2.2**. To allow for futureproofing, it is proposed that a section of the Alternative Alignment would be capable of operating at 275 kV in the future, if required.

Full details of the Proposed Development with the Alternative Alignment are provided in the **Volume 5: Chapter 3: The Proposed Development - Alternative Alignment.**

1.3 Objectives

This PMP outlines the overall approach of minimising disruption to peatland, and it aims to ensure that all further opportunities to minimise peat disturbance and extraction would be taken during detailed design and construction of the development.

The PMP has been developed to demonstrate that peat has been afforded significant consideration during the routeing, alignment, design and construction phase of the Alternative Alignment, should consent be granted. Specifically, it shows, with the benefit of site-specific peat probing data, how areas of deeper peat have been avoided where technically feasible and how shallow deposits of peat and soils can be safeguarded and used to support the long-term habitat restoration and management proposals.

1.4 Role of the Peat Management Plan

The PMP is intended to be a working document to be used throughout the key stages of the design, construction, operation, decommissioning and re-instatement phases of the Alternative Alignment as part of an overall Construction Environmental Management Plan (CEMP). These stages are outlined below.

Stage 1: Environmental Impact Assessment (EIA)

This report forms the Outline PMP and is submitted as part of the EIA Report. From this initial report the PMP will be developed further into a Stage 2 Pre-Construction PMP.

Stage 2: Post Consent / Pre-Construction

The peat mass balance calculations may be further developed prior to the works commencing, following detailed ground investigation or further survey works required to inform detailed design, or that may be required under planning consent conditions.

Stage 3: Construction Stage

Actual peat volumes excavated during construction will be recorded against the overall predicted volumes. Within micrositing allowances, the alignment and design of tracks, tower foundation and associated construction methods will be reviewed to avoid/minimise peat disturbance as much as possible considering the more detailed information available once construction commences. A regular review and update of the peat mass balance table will be undertaken by the appointed Principal Contractor and monitored by the Environmental Clerk of Works (EnvCoW) on-site and made available to regulators as required.

1.5 Legislation and Guidance

The PMP has been compiled in accordance with the following legislation and best practice guidance:

- National Planning Framework for Scotland 4 (NPF4) (Scottish Government, February 2023)[1];
- Scottish Government, Scottish Natural Heritage, SEPA (2017) 'Peat Survey Guidance; Developments on Peatland: Site Surveys'[2];
- SEPA Regulatory Position Statement - Developments on Peat (Scottish Environment Protection Agency, 2010)[3];
- Good Practice During Wind Farm Construction, NatureScot (July 2024)[4];
- Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste (Scottish Renewables and SEPA, 2012) [5];
- The Waste Management Licensing (Scotland) Regulations 2011[6];
- Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Scottish Government, January 2017) [7]; and
- Floating Roads on Peat - Report into Good Practice in Design, Construction and Use of Floating Roads on Peat with reference to Wind Farm Developments in Scotland (Forestry Commission Scotland & Scottish Natural Heritage, 2010) [8].

Requirements of National Planning Framework for Scotland 4

The intent of Policy 5 (Soils) of NPF4[1]is "*to protect carbon rich soils, restore peatlands and minimise the disturbance of soils from development*".

1 Scottish Government (2023). https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2022/11/national-planning-framework-4-revised-draft/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4-revised-draft.pdf

2 Scottish Government, Scottish Natural Heritage, SEPA (2017) Peatland Survey. Guidance on Developments on Peatland, on-line version only.

3 Scottish Environment Protection Agency. 2010. Regulatory Position Statement – Developments on Peat

4 NatureScot (July 2024), Good Practice During Wind Farm Construction. https://www.nature.scot/doc/good-practice-during-wind-farm-construction

5 Scottish Renewables, Scottish Environment Protection Agency. 2012. Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste

6 Scottish Government 2011, The Waste Management Licensing (Scotland) Regulations 2011. https://www.legislation.gov.uk/sdsi/2011/9780111012147/contents

7 Peat Landslide Hazard and Risk Assessments (Scottish Government, April 2017)

8 Scottish Natural Heritage, Forestry Commission (August 2010). Floating Roads on Peat

The Policy states [5(a)] that development proposals should only be supported if they are designed and constructed:

- *in accordance with the mitigation hierarchy by first avoiding and then minimising the amount of disturbance to soils on undeveloped land; and*
- *in a manner that protects soils from damage including from compaction and erosion, and that minimises soils sealing.*

Further [5(c)] confirms *that development proposals on peatland, carbon rich soils, and priority peatland will only be supported if they are:*

- *essential infrastructure and there is a specific locational need and no other suitable site;*
- *the generation of energy from renewable sources that optimises the contribution of the area to greenhouse gas emissions reductions targets;*
- *small-scale development directly linked to a rural business, farm or croft;*
- *supporting a fragile community in a rural or island area; or*
- *restoration of peatland habitats.*

And [5(d)] confirms *that where development on peatland, carbon-rich soils or priority peatland habitat is proposed, a detailed site specific assessment will be required to identify:*

- *the baseline depth, habitat condition quality and stability of carbon rich soils;*
- *the likely effects of the development on peatland, including on soil disturbance; and*
- *the likely net effects of the development on climate emissions and loss of carbon.*

Policy 5 also confirms that the site specific (above) assessment [5(d)] "*should inform careful project design and ensure, in accordance with relevant guidance and the mitigation hierarchy, that adverse impacts are first avoided and then minimised through best practice. A peat management plan will be required to demonstrate that this approach has been followed, alongside other appropriate plans required for restoring and/ or enhancing the site into a functioning peatland system capable of achieving carbon sequestration*".

This Stage 1 Outline PMP considers the protection and safeguarding of peat and seeks to fulfil the requirements of Policy 5(d) with further detail on peatland habitat and peatland restoration provided in **Volume 4: Appendix V1-7.8: Outline Habitat Management Plan.**

Mitigation Hierarchy

SEPA[3] has published guidance regarding the mitigation hierarchy for developments on peat which is summarised below and has been used in development of the outline PMP:

- Prevention – avoiding generating excess peat during construction (e.g. by avoiding peat areas or by using construction methods that do not require excavation such as floating tracks);
- Re-use – use of peat produced on-site in restoration, provided that its use is fully justified and suitable;
- Recycling / Recovery / Treatment – modify peat produced on-site for use as fuel, or as a compost / soil conditioner, or dewater peat to improve its mechanical properties in support to re-use; and
- Storage – applying the SEPA guidance, storage of peat up to a depth of 2 m is not classified as a waste and, however clarification should be sought from the waste

regulator prior to re-use and care must be taken to ensure that it does not cause environmental pollution.

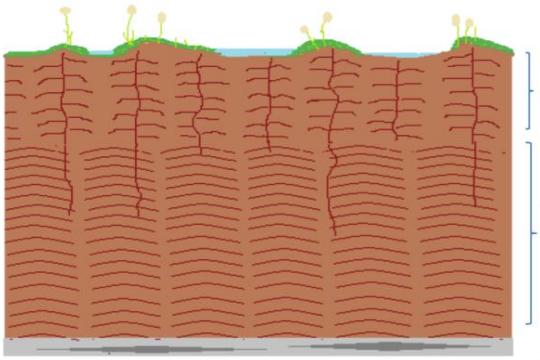
2.0 Baseline Conditions

2.1 Definition of Peat

Peat is defined as a material consisting of the partially decomposed remains of plant material and organic matter preserved over a period in a waterlogged environment resulting in anaerobic conditions and is of depths >0.5 m.

Peat can be classed as two principal types, the acrotelm layer and the catotelm layer as shown on **Plate 1-1**.

Plate 1-1: Drawing of two layered Structure of Active Bog Peatlands above Non-Active Peat[9]



The acrotelm layer is found in the upper layer of peat where conditions are relatively dry and comprises living vegetation and partially decomposed plant material. Hydraulic conductivity in this layer tends to be higher in relation to distance from the water table. The thickness of the acrotelm layer varies depending on topography such as steepness of slope, peat hags, and hummocks. In particular, the acrotelm layer can be affected during periods of drought or as a consequence of drainage. Fibrous in texture, the acrotelm layer has some tensile strength and is generally considered to be stable for storage and re-use.

The catotelm layer is found under the acrotelm layer and comprises decayed plant material and organisms and is denser and with a very low hydraulic conductivity. The catotelm layer sits below the water table resulting in permanent anaerobic conditions. The catotelm layer is amorphous and has very low tensile strength making it less suitable for storage and re-use.

2.2 Topography

Based on the digital terrain model available from the BGS Geoindex[10], the topography across the Alternative Alignment is generally low-lying (20 to 150 m AOD) with typically moderate slopes with some locally steep slopes around hilltops and surface water and river valleys.

The Alternative Alignment exhibits moderate to steep slopes in the western extents which climb towards the east before reaching a peak of approximately 171 m AOD at Cnoc Eipteil. The Alternative Alignment gently slopes towards the east with a steeper descent at Kirkton before reaching the lowest elevation of approximately 20 m AOD on the banks of the Halladale River. There are extensive flatter expanses and gentle slopes situated throughout the Alternative Alignment, particularly around Towers 47 and 48.

---

9 Bruneau, P.M.C & Johnson, S.M. 2014. Scotland's peatland - definitions & information resources. Scottish Natural Heritage Commissioned Report No 701.

10 BGS Online Viewer, available at [https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.133433804.376188765.1646739904-1030004651.1646739904]

2.3 Peatland Classification

The Carbon and Peatland Map 2016[11] indicates that most of the Alternative Alignment is located within Class 1 and Class 2 peatland. Class 1 and Class 2 peatlands are considered nationally important carbon rich soils, deep peat and priority peatland habitats with high conservation and restoration value. Most of the proposed access tracks (except tracks across land to the east of the Alternative Alignment), and towers 19, 20, 22, 26, 29 to 31, A1 to A11, A26 to A27, 47 to 49, and 54 along with the temporary UGC and OHL diversions are located in mapped Class 1 peatland. The cable sealing end (CSE) compound, underground cables (UGC's) and towers 23 to 25, 27, 28, A12, A15 to A24, 51, 55 to 61, and 64 are located in mapped Class 2 peatland.

Peat and peat soils throughout and surrounding the Alternative Alignment have been used intensively over the past century. Across the Alternative Alignment , grazing, artificial drainage and peat cuttings have been observed using aerial imagery and during site walkovers. In addition, plantation forestry is present to the west of the Alternative Alignment. In addition, the east of the Alternative Alignment was subject to intense peat loss as a consequence of the 2019 Flow Country Wildfire.

The Carbon and Peatland classifications are provided in **Volume 2: Figure V5-7.5.**

2.4 Hydrology

The Alternative Alignment is located within three main surface water catchments, River Strathy surface water catchment to the west, the Halladale River surface water catchment to the east, and the Tongue Coastal catchment to the north.

The River Strathy flows northwards within the western extent of the Alternative Alignment before discharging to the sea at Strathy Bay, approximately 2.0 km north of the Alternative Alignment. The Alternative Alignment would not cross the River Strathy. The Halladale River flows northwards within the eastern extent of the Alternative Alignment before discharging to the sea at Melvich Bay, approximately 1.5 km north of the Alternative Alignment. Only conductors associated with the Alternative Alignment would cross over the Halladale River at NGR NC 90159 59579 (between towers 63 and 64, no track crossing of the river is proposed). The Alternative Alignment crosses a number of watercourses that drain northwards to the coast.

The Alternative Alignment is drained by the following sub catchments:

- Bowside Burn sub catchment of the River Strathy which drains a small area to the south-west of the Alternative Alignment. The burn flows generally westwards before discharging into the River Strathy approximately 420 m downstream of the Alternative Alignment. The Alternative Alignment would cross the burn at NGR NC 83133 60994 (between towers 21 and 22, no track is proposed to cross the burn); and,
- Allt na n Eaglaise sub catchment of the Halladale River which drains a large area to the south and southeast of the Alternative Alignment. Allt na n Eaglaise flows generally northwards, through the eastern extent of the Alternative Alignment, before discharging into the Halladale River approximately 680 m downstream of the Alternative Alignment. The Alternative Alignment would cross Allt na n Eaglaise at NGR NC 88565 60876 (between towers 53 and 54). There are several tributaries of Allt na n Eaglaise near the Alternative Alignment.

11 NatureScot, Carbon and Peatland Map 2016, Available online at: map.environment.gov.scot/soil_maps/

2.5 Hydrogeology

Information from Scotland's environment map[12] indicates that the Alternative Alignment is underlain by the Moine Supergroup, the Middle Old Red Sandstone, the Lower Old Red Sandstone and an unnamed igneous intrusive complex (Late Silurian to Early Devonian). The Moine Supergroup is a low productivity aquifer yielding small amounts of groundwater in near surface weathered zones and secondary fractures. This aquifer type is mapped throughout the majority of the Alternative Alignment, underlying Towers 21 to 28, A13 to A27 and 447 to 64. The Middle Old Red Sandstone is a moderately productive aquifer comprised of sandstones, siltstones, mudstones and conglomerates which locally yield small amounts of groundwater. This aquifer is mapped throughout the northern area of the Alternative Alignment, between Towers A1 to A12 and Towers A29 to A31.

2.6 Sensitive Receptors

Review of NatureScot Sitelink confirms that approximately 250 m of the Proposed Development is located within the western edge of West Halladale Site of Special Scientific Interest (SSSI) which is also part of the larger Caithness and Sutherland Peatlands Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site. The SSSI, SAC, SPA and Ramsar site have been designated for breeding bird assemblage, otters, marsh saxifrage and various freshwater and upland habitats including blanket bog habitats. The qualifying or notified features of the designated sites are sensitive to changes in peat and water quality.

The Alternative Alignment is also located within the northern extent of the Flow Country World Heritage Site (WHS). An assessment of the WHS is detailed within **Volume 4: Appendix V1-7.7: Flow Country WHS Assessment**.

2.6.1 Groundwater Dependent Terrestrial Ecosystems (GWDTE)

Review of the National Vegetation Classification (NVC) habitat mapping concluded that GWDTE's are sustained by incident rainfall and local surface water runoff, therefore the buffers proposed in SEPAs GWDTE guidance need not apply. Further details on GWDTE are provided within **Volume 5: Chapter 5: Ecology – Alternative Alignment, and Chapter 7: Soils, Geology and Water – Alternative Alignment**.

12 Scotland's Environment Online Viewer. Available at [https://map.environment.gov.scot/sewebmap/]

3.0 Fieldwork

3.1 Peat Surveys

The following peat depth surveys were undertaken by SLR;

- Phase 1 survey undertaken in November 2023.
- Phase 2 surveys undertaken in April, May, July and September 2024.

Peat surveys were carried out in accordance with best practice guidance for developments on peatland**Error! Bookmark not defined.**,[2]. Phase 1 peat probing resulted in probing on a 100 m grid on initial assessment areas of the OHL route which was used in preliminary site layout designs. Phase 2 probing saw detailed probing undertaken across the Alternative Alignment layout, focussing on access tracks, tower locations and other site infrastructure. The Phase 1 survey informed the site design such that areas of recorded peat could avoided where technically feasible.

Phase 2 probing was typically undertaken on linear infrastructure (permanent / temporary tracks) at 25 m to 50 m spacings with offset probing locations either side (approximately 10 m to 25 m). Infrastructure (towers, CSE compound and UGC) was typically probed at 10 m grid spacings.

The proposed OHL and Tower 19 are in proximity to the existing Strathy North 132 kV trident 'H' wood pole OHL. In addition, the alignment at Tower 19 intercepts an existing BT cable. Therefore, where the proposed OHL intercepts existing utility infrastructure, peat probes were undertaken at a safe offset distance as agreed with SSEN Transmission.

The thickness of the peat was assessed using a graduated peat probe, approximately 6 mm diameter and capable of probing depths of up to 10 m. This was pushed vertically into the peat to refusal and the depth recorded, together with a unique location number and the co-ordinates from a handheld Global Positioning System instrument (GPS). The accuracy of the GPS was quoted as ±2 m, which was considered sufficiently accurate for this survey. All data was uploaded into a GIS database for incorporation into various drawings and analysis assessments.

Where the peat probing met refusal on a hard substrate, the 'feel' of the refusal can provide an insight into the nature of the substrate. The following criteria were used to assess material:

- Solid and abrupt refusal – rock;
- Solid but less abrupt refusal with grinding or crunching sound – sand or gravel or weathered rock;
- Rapid and firm refusal – clay; or
- Gradual refusal – dense peat or soft clay.

The relative stiffness of the peat was also assessed from the resistance to penetration of the probe and from the effort required to extract the probes. In all instances refusal was met on obstructions allowing identification of subsurface geology.

3.2 Peat Depth

Peat is generally defined as a soil with a surface organic layer in excess of 0.5 m**Error! Bookmark not defined.**. Where the probing recorded less than 0.5 m thick, it is considered to be a peaty soil (or organo-mineral soil). Soils with a peaty organic horizon over mineral soil are often referred to as 'peaty soils'. These organo-mineral soils are extensive across the UK uplands, but do not meet recognised definitions of peat as they are either shallower than true peat or have a lower carbon density.

A total of 10,762 peat probes were undertaken across all survey phases. **Figures V5-7.2.3** and **V5-7.2.4** detail the interpolated peat depth across the Proposed Development (including both the proposed and alternative alignments) based on the results of the survey work. The interpolation was undertaken using the Inverse Distance Weighting (IDW) methodology.

3.2.1 Peat Deposits

There are localised deep peat deposits (>1 m depth) situated across the Alternative Alignment. However, these deposits are generally situated across flatter expanses and in minor topographic lows. The peat deposits are generally confined by topography and rarely situated across steeper slopes.

Within the central areas of the Alternative Alignment, deep peat of up to 2 m was recorded within the area of Towers A1 to A9, with most peat depths ranging from 1 to 1.5 m.

Typical peat deposits observed in the central area of the OHL alignment. Towards the eastern extends of the Alternative Alignment peat depths of over 2 m were recorded at Towers A20 and A24 as these towers are within flatter expanses. Towers 47, 48 and 49 are also positioned within flatter expanses and peat depths up to 3 m were mapped.

Further to the south-east deep peat up to 2.5 m is recorded at Tower 61. The western areas of the Alternative Alignment do not feature many areas of deep peat. There is localised deep peat of up to 2 m at Tower 19 in the south-west.

Deeper peat (>1m) was present in localised areas of proposed access tracks.

Localised pockets of deep peat were recorded on the permanent access track connecting up the sections of existing access track to be upgraded, located approximately 1 km south west of Melvich in the area of Towers A20, A21 and A23.

The access tracks in the south-east generally recorded shallow peat depths with only localised deeper peat recorded at the temporary access track around Towers 51, 54, 57 and 58. An area of more extensive deeper peat is present on the permanent access track around Tower 61 with some minor localised areas of deeper peat present between Tower 62 and 63.

Table A: Peat Probing Results

Peat Thickness (m)	No. of Probes	Percentage (of total probes undertaken on-site)
0 (no peat)	129	1.2
0.01 – 0.49 (peaty soil)	6626	61.6
0.50 – 0.99	1809	16.8
1.00 – 1.49	727	6.8
1.50 – 1.99	545	5.1
2.00 – 2.49	346	3.2
2.50 – 2.99	294	2.7
3.00 – 3.49	164	1.5
3.50 – 3.99	71	0.7
> 4.0	51	0.5

3.3 Physical Peat Condition

Peat and peat soils surrounding the Alternative Alignment have been subject to a number of pressures over the past century which include grazing (deer), peat cutting (turbary) and wildfire which has contributed to significant degradation of peat habitats in areas of the Alternative Alignment. Peatland condition is detailed further in Peatland condition is detailed further in **Volume 5: Appendix V5-7.4: Peatland Condition Assessment – Alternative Alignment.**

Peat is described using BS5930[13] and the Von Post classification[14]. Four peat cores were undertaken using a peat auger and used to inform interpretations of the underlying peat. Peat samples were undertaken to depths of between 2 and 4 mbgl and the descriptions are detailed below in the following table.

Table B: Peat Coring Results

Location	Von Post Description	Description
PC01: Tower 61	H2, B2 H3, B2	GL – 1.00 Dark brown fibrous PEAT 1.00 – 4.00 Dark brown pseudo-fibrous PEAT
PC02: Tower 49	H2, B2 H4, B2	GL – 1.00 Dark brown fibrous PEAT 1.00 – 2.00 Dark brown pseudo-fibrous PEAT
PC03: Tower 49	H2, B2 H3, B2	GL – 1.00 Dark brown fibrous PEAT 1.00 – 3.00 Dark brown pseudo-fibrous PEAT
PC04: Upgraded Access Track	H2, B2 H3, B2	GL – 0.50 Dark brown fibrous PEAT 0.50 – 3.00 Dark brown pseudo-fibrous PEAT

Peat core logs and photographs are presented within **Annex B**.

3.4 Substrate

Where possible, in the SLR investigation, an assessment of the substrate was made, as described previously. From the evidence of the probing and coring, the substrate was recorded as the following:

- Granular, recorded at 9,730 (90%) probe locations; and
- Rock, recorded at 1,032 (10%) probe locations.

Based on a review of the BGS mapping and site surveys, the granular material is anticipated to be of glacial till origin and of weathered bedrock. No rock samples were recovered from probe locations however, based on the limited rock exposures and BGS mapping, the bedrock is interpreted to be metamorphic, igneous and sedimentary in nature.

3.5 Acrotelmic and Catotelmic Layers

Based on the recorded physical peat characteristics within the Alternative Alignment site it has been assumed that the acrotelm layer is 500 mm thick. The depth underlaying the acrotelm layer is therefore assumed to be the catotelm layer (>500 mm) and is assumed to be the remaining section of the measured peat depth.

13 BS 5930:2015+A1:2020, Code of practice for ground investigations

14 Von Post, L. and Grunland, E., (1926), 'Sodra Sveriges torvillganger 1' Sverges Geol. Unders. Avh., C335, 1-127.

4.0 Peat Management and Mitigation

The design of the Alternative Alignment has taken account of a number of environmental and technical constraints. The design sought to avoid areas of thick peat where technically feasible, whilst taking into account other environmental and technical factors such as ecology, ornithology, archaeology, hydrology, topography and existing infrastructure. The Alternative Alignment design evolution has sought to avoid areas where peat is >1 m deep based on initial surveys.

The design has evolved through a combination of initial low resolution probing on a 100 m grid to develop initial designs and then multiple phases of more detailed probing to allow refinements to the design and avoid further areas of extensive deeper peat >1 m. The detailed peat probing has highlighted the presence of more localised deep peat deposits >1 m which have typically formed in flatter expanses present in areas of proposed infrastructure which the Alternative Alignment cannot avoid based on other design constraints (see **Volume 5: Chapter 2: The Routeing Process and Alternatives – Alternative Alignment**).

The initial construction phase for the Alternative Alignment will include soil and peat stripping and excavation activities associated with construction of the Alternative Alignment.

Any peat and soils excavated for the temporary diversion works involving the temporary UGC and OHL alignments will be temporarily stored and then re-instated in accordance with the guidance and recommendations provided in the following section of this report.

There are four main types of impact on peat which can occur during construction. These are:

- Loss of structural integrity and peat strength, due to stripping off or damaging the surface vegetation turf, excavation, handling and transporting peat (particularly wet, subsurface peat);
- Erosion and gullying, caused by exposure and desiccation of bare peat surfaces primarily caused by water erosion, due to surface runoff after rainfall;
- Contamination, caused by leaks, spillages or inappropriate laydown of materials; and
- Peat slide, caused by laying wet peat on top of wet peat, laying other heavy materials (including excavated mineral soil or other construction materials) on top of wet peat or by inappropriate stockpiling, such as attempting to create stockpiles of peat that are too high, without bunding, engineering or geotechnical support.

The best practice and control measures detailed in the following sections have been written in accordance with the principles of the Nature Scot (2024)[4] guidance. These measures are designed to prevent the construction impacts from occurring.

4.1 Excavation

Excavated peat should be excavated as turves, including the acrotelm (surface vegetation) and a layer of adjoining catotelm (more humified peat) typically up to 0.5 m thick in total, or as blocks of catotelm; the acrotelm should not be separated from its underlying peat;

- the turves should be as large as possible to minimise desiccation during storage, though the practicalities of handling should be considered;
- the mixing of excavated peat with substrate materials to be avoided at all times; and
- consider timing of excavation activities to avoid very wet weather and avoid multiple handling to minimise the likelihood of excavated peat losing structural integrity.

If possible, extract intact full depth acrotelm layers from the top surface of the peat deposit. This technique will maintain connectivity between the surface vegetation and the partially decomposed upper layers of the catotelm.

4.2 Re-use

All excavated material (including peat and non-peat soils) from the installation of the towers will be re-used for reinstatement immediately surrounding the towers.

It is anticipated that the volume of material excavated for the new permanent access track can be entirely reused for a variety of restoration purposes, including verge restoration to taper into the existing peatland by infilling depressions and levelling-out gradients as part of the cut and fill track construction process. As a result, based on a maximum running width of 5 m for new permanent access tracks (plus 1.5 m for drainage measures), the balance between excavation and re-use will be zero. Post construction, the permanent access tracks will be restored to a running width of 3.5 m (plus 1.5 m for drainage measures).

To estimate the volume of peat that could be re-used as part of construction and restoration, an indicative estimate has been calculated based on best practice and past project experience. **Annex A** provides an approximate total volume of peat that could be accommodated across the site. This estimate has incorporated the predicted volumes of both acrotelmic and catotelmic peat.

There is also potential for excavated peat to be used for habitat and peat restoration on or locally to the Alternative Alignment, as set out in **Volume 4: Appendix V1-7.8: Connagill Cluster Outline Habitat Management Plan**. This potential re-use option has not been quantified but will provide an additional method to retain and beneficially re-use material.

4.3 Storage

The following good practice applies to the temporary storage of peaty soils/peat:

- stripped materials should be carefully separated to keep peat and other type of soils apart;
- to minimise handling and haulage distances, excavated material should be stored local to the site of excavation or end point of restoration;
- peat turves should be stored in wet conditions or irrigated in order to prevent desiccation (once dried, peat will not rewet);
- stockpiling of peat should be in large volumes to minimise exposure to wind and sun (and desiccation), but with due consideration for slope stability, but should not exceed 1 m in height to maintain stability of stockpile;
- stockpiles should be isolated from watercourses or drains with appropriate bunding to minimise pollution risks;
- to be stored a minimum of 10 m from any watercourse.
- stores of non-turf (catotelm) peat should be bladed off to reduce the surface area and desiccation of the stored peat; and
- peat storage areas should be monitored during periods of very wet weather, or during snowmelt, to identify early signs of peat instability.

Any peaty soils/peat to be removed during construction will require a temporary storage area near to the construction works / area of re-use. Where peat cannot be transferred immediately to an appropriate restoration area, short term storage will be required. In this case, the following good practice applies:

- peat should be stored around the excavation perimeter at sufficient distance from the cut face to prevent overburden induced failure;
- local gullies, diffuse drainage lines (or very wet ground) and locally steep slopes should be avoided for peat storage;
- drying of temporary stored peat should be avoided by irrigation or by seeding (although this is unlikely to be significant for peat materials stored less than 2 months);
- peat generated from permanent excavations should be transported directly to its allocated restoration location, to minimise the volume being stockpiled with the possibility of drying out;
- stores of catotelm peat should be bladed off to reduce their surface area and minimise desiccation;
- where transport cannot be undertaken immediately, stored peat should be irrigated to limit drying and stored on a geotextile mat to promote stability; and
- monitoring of large areas of peat storage during wet weather or snowmelt should be undertaken to identify any early signs of peat instability.

4.4 Transport

The following good practice applies to transport:

- movement of turves should be kept to a minimum once excavated, and therefore it is preferable to transport peat planned for translocation and reinstatement to its destination at the time of excavation; and
- if heavy goods vehicles (HGVs) / dump trucks that are used for transporting non-peat material are also to be used for peat materials, measures should be taken to minimise cross-contamination of peat soils with other materials.

4.5 Handling

Following refinement of the peat model, a detailed storage and handling plan should be prepared forming part of the detailed CEMP, including:

- best estimate excavation volume at each infrastructure location (including peat volumes split into area/volume of ‘acrotelm’ or ‘turf’, and volume of catotelm) which would be achieved by undertaking additional probing in line with current guidance;
- volume to be stored locally and volume to be transferred directly on excavation to restoration areas elsewhere (e.g. peat storage areas) in order to minimise handling;
- location and size of storage area relative to tower foundations and natural peat morphology / drainage features; and
- irrigation requirements and methods to minimise desiccation of excavated peat during short term storage.

These parameters are best determined post-consent, informed by detailed ground investigation with the micro-siting areas for each element of infrastructure.

4.6 Peatland Restoration

Peatland restoration (to be formally defined following consent) would be undertaken across the Alternative Alignment to restore peatland. The proposals for peatland restoration are detailed within **Volume 4: Appendix V1-7.8: Connagill Cluster Outline Habitat Management Plan**. During restoration, the following best practice should be followed:

- carefully evaluate potential restoration sites, such as peat storage areas for their suitability, and agree that these sites are appropriate with the ECoW, landowners and relevant consultees;
- undertake restoration and revegetation or reseeding work as soon as practically possible;
- where required, consider exclusion of livestock from areas of the Alternative Alignment undergoing restoration, to minimise impacts on revegetation; and
- as far as reasonably practicable, restoration will be carried out concurrently with construction rather than at its conclusion.

4.7 Access Track

There is best practice guidance available[4,8] to support access track design in peatlands. Guidance is generally focused on floating tracks and excavated tracks and is summarised below. Further details on typical track design are provided in **Volume 4: Appendix V1-3.3: Access Track Schematic.**

Based on the avoidance of significant areas of thick peat with tracks all typically present on peat <1 m and only limited sections of track on localised areas of peat >1 m then the use of excavated tracks is proposed. Floating tracks may be considered on suitable length sections of access track where peat depths are >1.0 m, where detailed ground investigation confirms suitability.

Excavated tracks require complete excavation of soil/peat to a competent substrate. Excavated tracks will generally be undertaken where peat depths are less than 1.0 m. This peat/soil would require storage ahead of re-use elsewhere within the Proposed Development with the Alternative Alignment. Good practice guidance relates mainly to drainage in association with excavated tracks:

- trackside ditches should capture surface water (within the acrotelm) before it reaches the road;
- interceptor drains should be shallow and flat bottomed (and preferably entirely within the acrotelm to limit drawdown of the water table);
- any stripped peat turves should be placed back in the invert and sides of the ditch to assist regeneration and prevent erosion to the peat and wash out that could occur; and
- culverts and cross drains should be installed under excavated tracks to maintain subsurface drainage pathways (such as natural soil pipes or flushes). Discharge from constructed drainage should allow for as much diffuse dispersion of clean (silt free) water as possible while minimising disturbance to existing peatland as far as possible. Silt mitigation measures will be incorporated into all constructed drainage as per the requirements of the CEMP.

Although excavation is normally undertaken in peat of minor thickness (< 1.0 m), there is a possibility of minor slippage from the cut face of the peat mass. Accordingly:

- free faces should be inspected for evidence of instability (cracking, bulging, excessive discharge of water or sudden cessation in discharge); and

- where significant depths of peat are to be stored adjacent to an excavation, stability analysis should be conducted to determine Factor of Safety (FoS) and an acceptable FoS adopted for loaded areas.

Regular routine monitoring should be scheduled post-construction to ensure that hydrological pathways and track integrity have been suitably maintained.

4.8 Monitoring and Inspection

There would be frequent, routine and regular inspections of peat in all stockpiles and temporary storage areas as part of the PMP audit process. Inspections would assess in situ peat physical conditions, integrity of containment and temporary drainage conditions, and they would seek to confirm that stockpile design and management was adequate to prevent erosion and peat slide. These inspections would take place weekly during stockpile creation and storage.

Should any problems be observed during regular visual inspections of peat stockpiles, this would invoke implementation of an appropriate corrective action which would be recorded and monitored for effectiveness. Types of corrective actions would include, but would not necessarily be limited to; modification of temporary drainage, additional or modified bunding, incorporating of sediment fencing if required, light re-grading to correct any areas of surface erosion, etc.

Regular, frequent inspections of peat conditions during construction and restoration phases of work would be carried out by the Engineer and EnvCoW as follows:

- peat surface, peat profile and peat consistency conditions would be carried out as part of ground investigations prior to the start of construction. This information would provide detailed information on the baseline conditions for each part of the infrastructure footprint;
- restored peat conditions would be inspected immediately after restoration to ensure that the methods detailed in the PMP had been correctly implemented and to inform any corrective actions should they be required;
- further monitoring to be undertaken where required to ensure restoration works have been correctly implemented; and
- the physical condition of peat would be retained as carefully as possible both at the peat storage and the peat restoration stages. This is particularly important for vegetation establishment.

5.0 Peat Balance Assessment

Table B provides an estimate of peat and peaty soil volumes to be excavated and re-used during the construction of the Alternative Alignment. The peat and peaty soil excavation and re-use volumes are detailed for each infrastructure element in **Annex A**. The excavated materials data from **Annex A** indicates that the areas of infrastructure within the Proposed Development with the Alternative Alignment are typically located in areas of peaty soils however there are infrastructure locations present in areas of peat >1.0 m typically in the flatter topographic areas which cannot be avoided due to design constraints.

5.1 Excavated Volumes

Peat excavation volumes associated with the construction of the Alternative Alignment have been calculated using the results from the peat depth surveys and interpolation using the GIS package ArcGIS. Peat excavation volumes are detailed in Table C and **Annex A** and based on the following assumptions:

- Interpolation of peat depth was undertaken using the Inverse Distance Weighting (IDW) interpolation method.
- An estimated acrotelm depth of 0.5 m across all infrastructure based on peat depth survey results.
- The acrotelm volumes have been calculated based on the average peat depth across each item of infrastructure and linear infrastructure based on peat depth survey results.
- An assumption that the peat probe depths are representative of the actual depth of peat (validated by the peat coring).

The excavated volumes will comprise primarily acrotelmic peat and soils.

5.2 Reuse Volumes

The volume of peat to be reused around the Alternative Alignment is detailed in Table C and **Annex A** and based on the following assumptions:

- In appropriate locations around the infrastructure perimeter such as track verges, the edges of permanent structures a 3 m wide strip either side of the track at a thickness of about 0.5 m (turves and acrotelmic peat).
- Reinstatement of tower working area excavations with re-instatement using peat and soils.

5.3 Net Peat Balance

Table C provides an estimate of peat volumes to be excavated and reused during the construction of the infrastructure.

Table C: Peat Balance Assessment

Infrastructure	Volume of Peat Excavated (m^3)	Volume of Peat Reused and Reinstated (m^3)
Permanent Access Track	33,378	38,513
Temporary Access Track	7,844	7,844
Existing Access Track (to be upgraded)	3,597	3,597
Underground Cable (UGC)	5,172	5,172
Cable Sealing End (CSE)	844	110
Towers	136,952	136,952
Total	**187,785**	**192,187**

The indicative total volume of peat predicted to be excavated of 187,785 m^3, does not exceed the intended total peat reuse volume of 192,187 m^3, therefore no excess peat is required to be disposed off-site as a consequence of the Proposed Development with the Alternative Alignment.

6.0 Waste Classification

This section of the Stage 1 PMP includes the method for dealing with peat which could potentially be classified as waste (only if the above volumes estimate significant quantities of catotelm peat, which cannot be re-used).

Table D outlines where those materials that are likely to be generated on-site, fall within the Waste Management Licensing (Scotland) Regulations 2011[15].

Based on the results presented in this document, it has been concluded that all of the materials to be excavated on-site would fall within the non-waste classification and would be re-used on-site. Based on a detailed probing exercise and visual inspection of the peat, it is predominantly fibrous peat which would be suitable to be re-used on-site. Typically, the peat was found to be fibrous and fairly dry within the top metre before becoming slightly more pseudo-fibrous with depth.

15 Scottish Government 2011, The Waste Management Licensing (Scotland) Regulations 2011. https://www.legislation.gov.uk/sdsi/2011/9780111012147/contents

Table D: Excavated Materials – Assessment of Suitability

Excavated Material	Indicative Volume % of total excavated soils	Is there a suitable use for material	Is the Material required for use on Site	Material Classified as Waste	Re-use Potential	Re-use on Site
Turf and Acrotelmic Peat	67	Yes	Yes	Not classified as waste	Yes	Will be re-used in reinstatement of access track verges, cut and fill verges, road verges, tower working areas, side slopes and check drains.
Catotelmic peat	33	Yes	Yes	Not classified as waste	Yes	Will be re-used in reinstatement of floated access track verges, cut and fill verges, road verges, tower working areas, side slopes and check drains.
Amorphous Catotelm Peat (amorphous material unable to stand unsupported when stockpiled >1m)	0	Potentially	Potentially*	Potentially if not required as justifiable restoration of habitat management works	Limited	If peat does not require treatment prior to re-use it can be used on-site providing adequate justification and method statements are provided and approved by SEPA. If it is unsuitable for use without treatment then it may be regarded as a waste. However, every attempt to avoid this type of peat has been incorporated into the design.

*Such uses for this type of material are limited, however there may be justification for use in the base of peat restoration areas to maintain waterlogged conditions and prevent desiccation of restored area and in some habitat management works such as gully or ditch blocking where saturated peat is required to mimic mire type habitats and encourage establishment of sphagnum.

7.0 Conclusion

This Stage 1 Outline PMP presents a pre-construction assessment of the expected peat extraction and reuse volumes associated with the works phase of the construction of the Proposed Development with the Alternative Alignment. The PMP also provides the guiding principles which would be applied during the construction of the Alternative Alignment. Peat depth surveys have shown that there are localised peat deposits across the Alternative Alignment.

Through a process of continued design refinement (focused on minimising peat excavation volumes) and adoption of best practice working methods, the Alternative Alignment has been shown to achieve an overall peat balance. Thus, all excavated material will be required for reuse as part of the works and no surplus peat would be generated.

The figures detailed within this report are to be considered indicative at this stage. The total peat volumes are based on a series of assumptions for the layout of the Alternative Alignment and the results of several phases of peat probing. Such parameters can still vary over small scale areas and therefore topographic changes in the bedrock profile could impact the total accuracy of the volume calculations.

The calculations presented here would be updated and expanded upon as part of detailed design works, taking account of pre-construction site investigations and micro-siting, to confirm actual quantities of arising peat. A detailed, construction phase PMP would be developed, and maintenance by updating this plan in conjunction with a Geotechnical Risk Register. The implementation of the detailed PMP would ensure a robust commitment to excavating, storing and reinstating peat in a manner that follows best practice and ensures the protection of peat throughout the construction and post-construction phases.

Figures

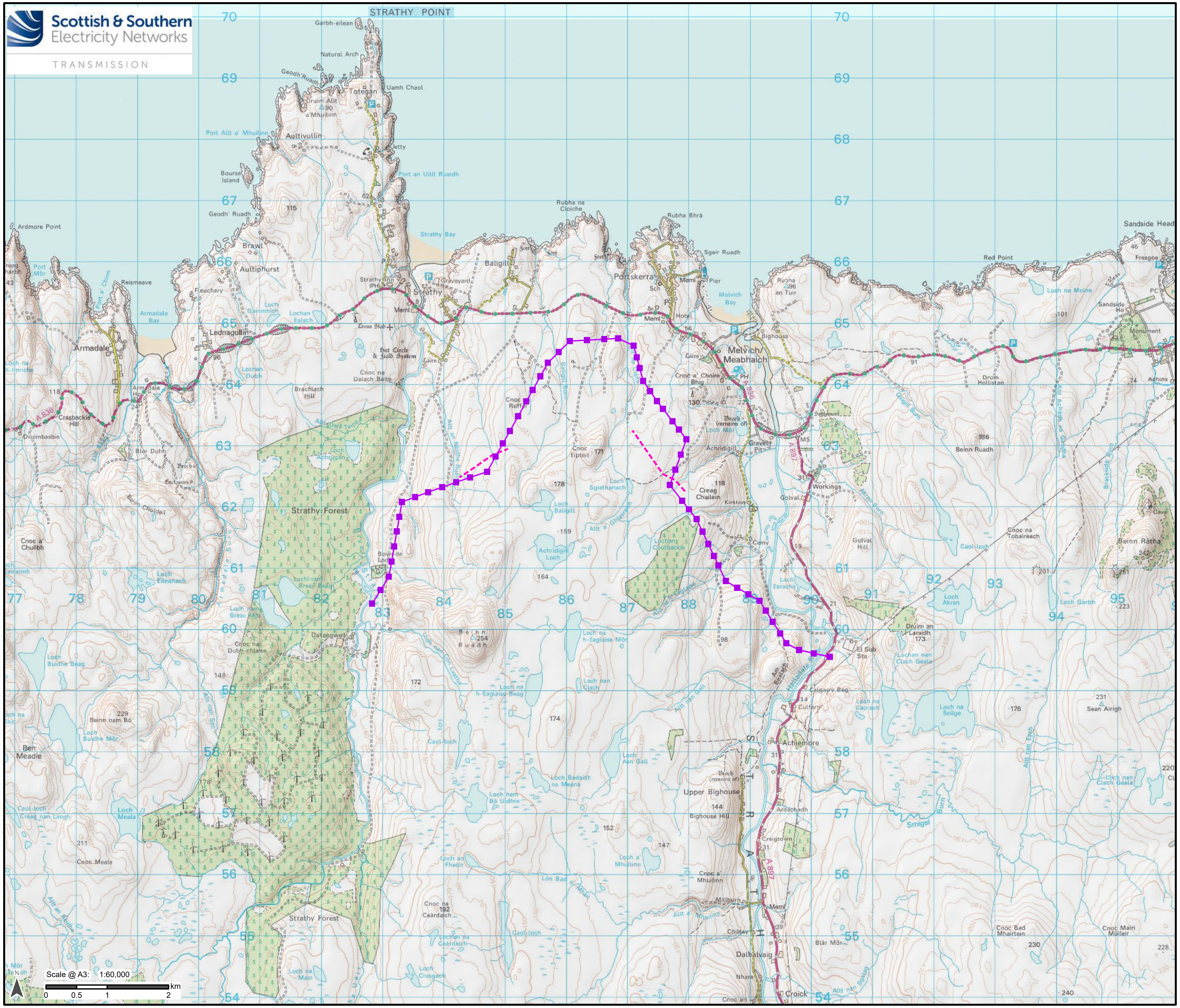
Strathy South Wind Farm Grid Connection

Volume 4: Volume 4: Appendix V5-7.2: Stage 1 Outline Peat Management Plan – Alternative Alignment

SSEN Transmission

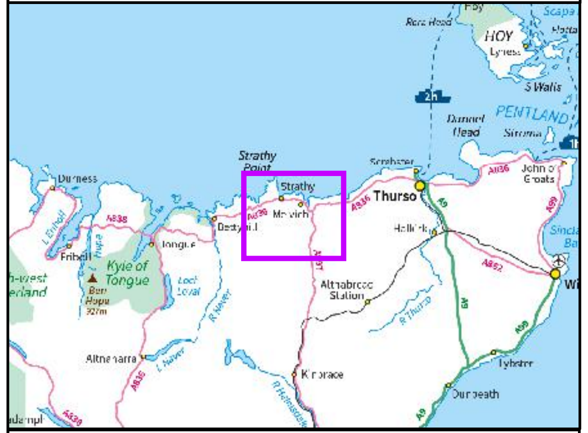
SLR Project No.: 428.013137.00001_04

Scottish & Southern Electricity Networks
TRANSMISSION

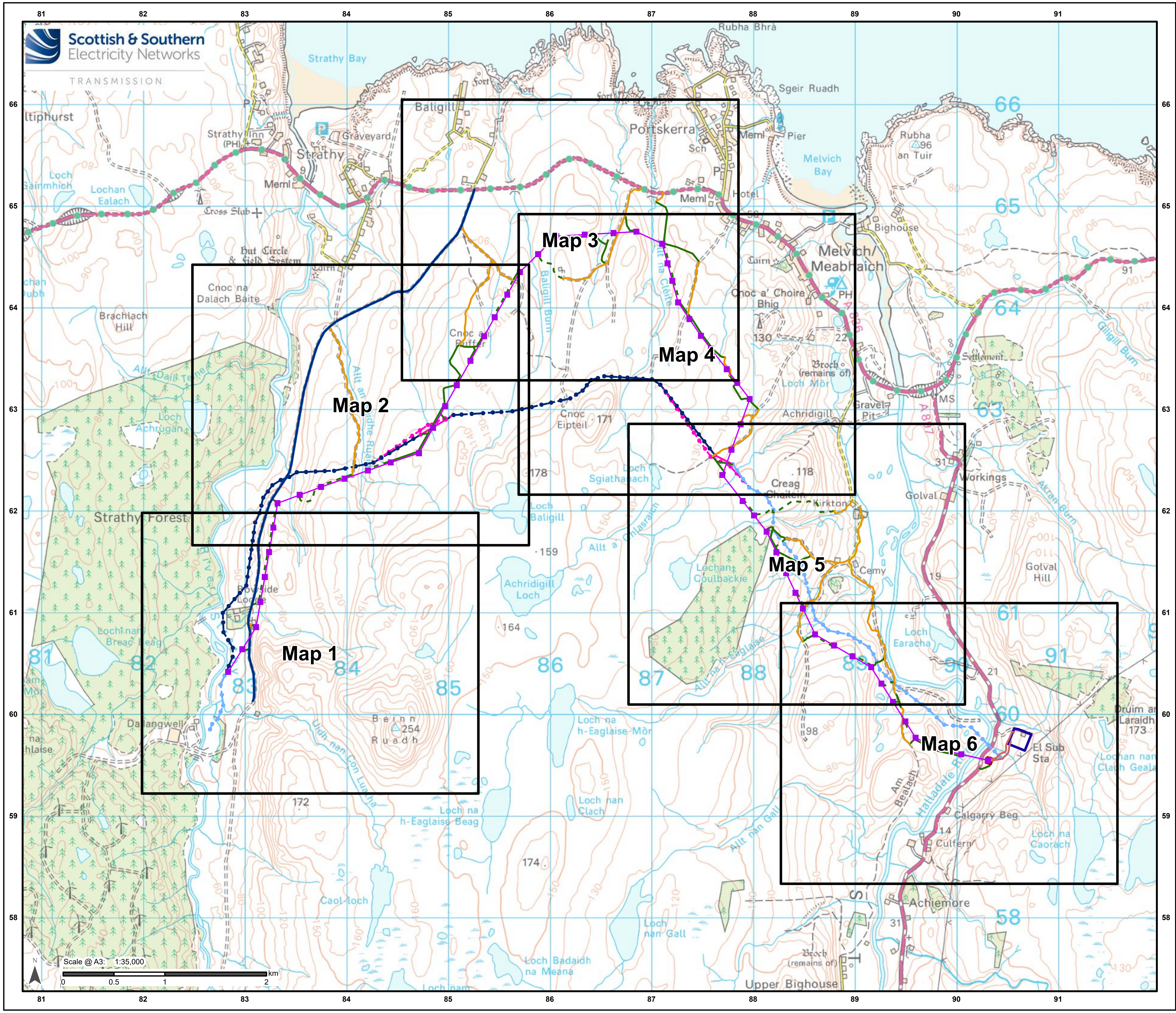


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Proposed Temporary OHL

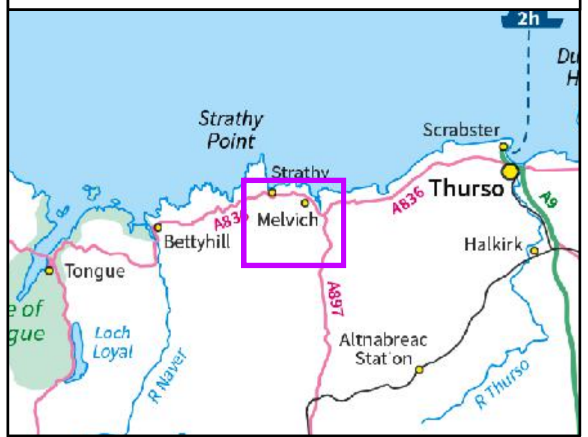


Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.1 - Site Location Alternative Alignment
Drawn by:	MM — Date: 20/01/2025
Drawing:	428.013137.00001.00071.0

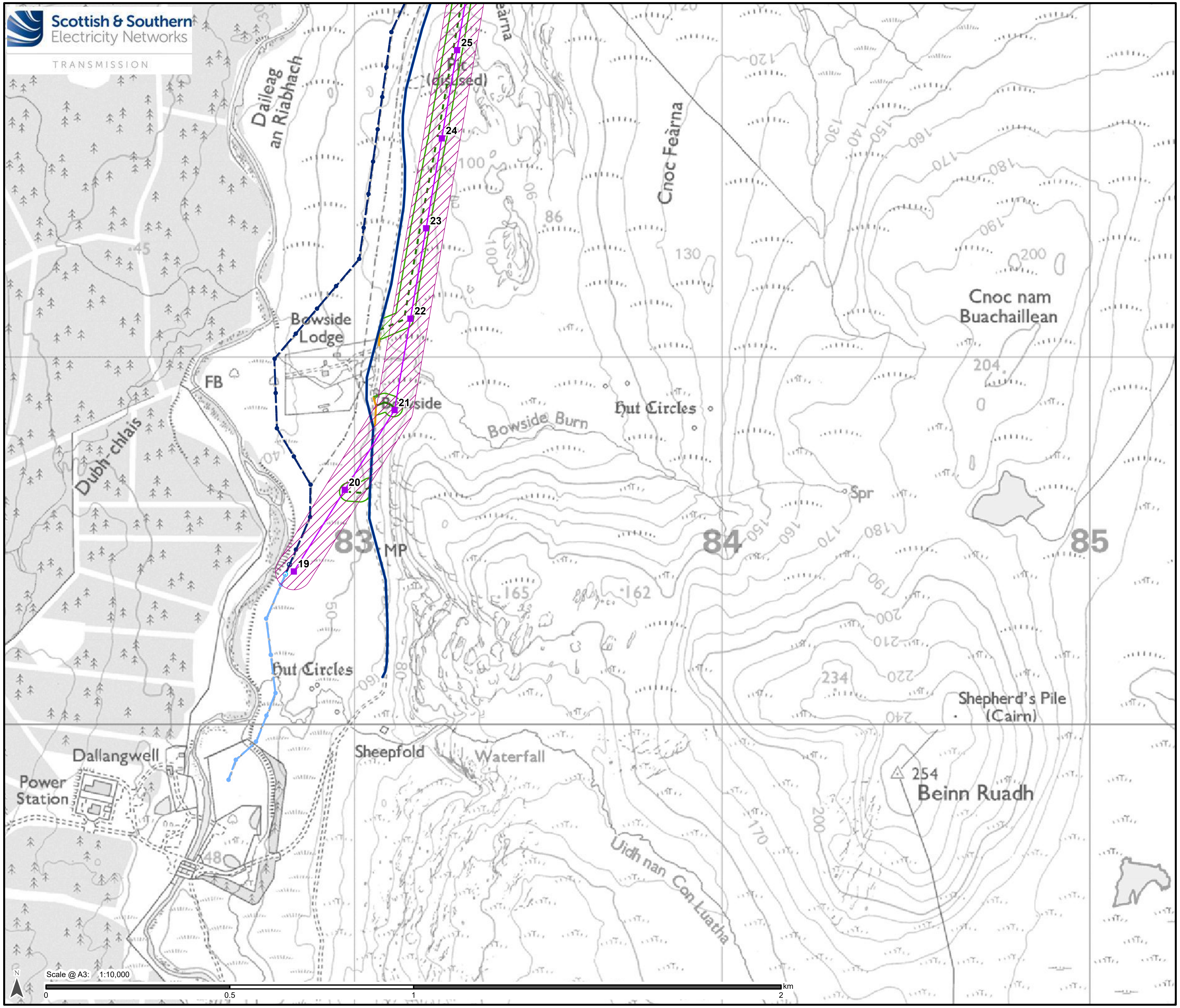


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Proposed Underground Cable (UGC)
- Proposed Cable Sealing End (CSE) Compound
- Existing Access Track
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Existing Wood Pole (H pole) (to be dismantled)
- Temporary Wood Pole (H pole)
- Proposed Temporary OHL
- Temporary UGC Alignment
- Existing Wood Pole (H pole) (to be dismantled)
- Connagill 275/132 kV Substation



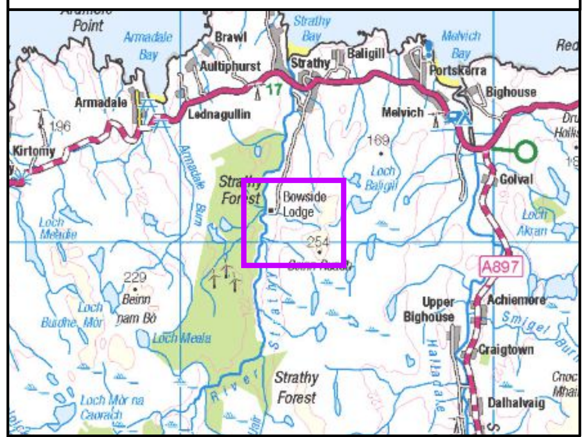
Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.2- Site Layout Alternative Alignment Overview
Drawn by:	MM — Date: 23/01/2025
Drawing:	428.013137.00001.00062.0



Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Access Track
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Existing Wood Pole (H pole) (to be dismantled)
- Existing Wood Pole (H pole) (to be dismantled)
- Proposed* Wood Pole (H pole) (to be retained)
- Proposed* Wood Pole (H pole) (to be dismantled)

*Proposed as part of Strathy Wood Wind Farm Grid Connection



Project No: LT560

Project: Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan

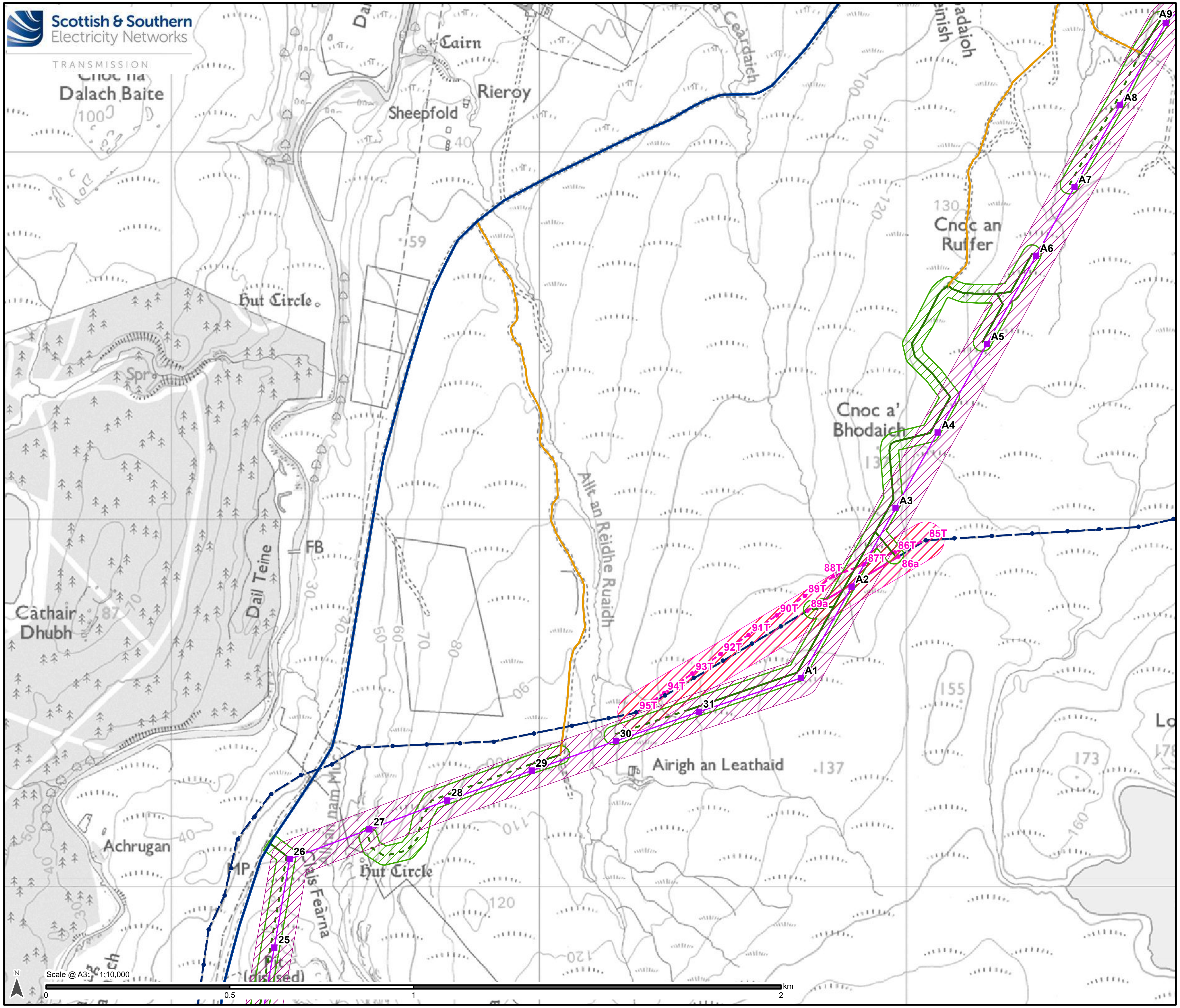
Title: Figure V5-7.2.2- Site Layout Alternative Alignment Map 1

Drawn by: MM

Date: 23/01/2025

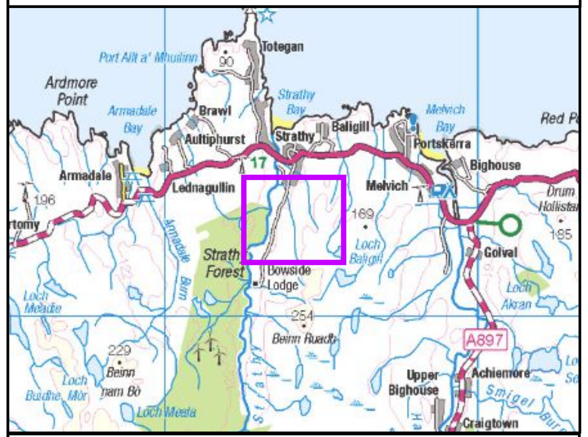
Drawing: 428.013137.00001.00062.0

Scottish & Southern Electricity Networks
TRANSMISSION



Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Access Track
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be dismantled)
- Temporary Wood Pole (H pole)
- Proposed Temporary OHL
- Limit of Deviation (Temporary OHL)
- Temporary UGC Alignment
- Existing Wood Pole (H pole) (to be dismantled)



Project No: LT560

Project: Strathy South Wind Farm Grid Connection
EIA Report - Peat Management Plan

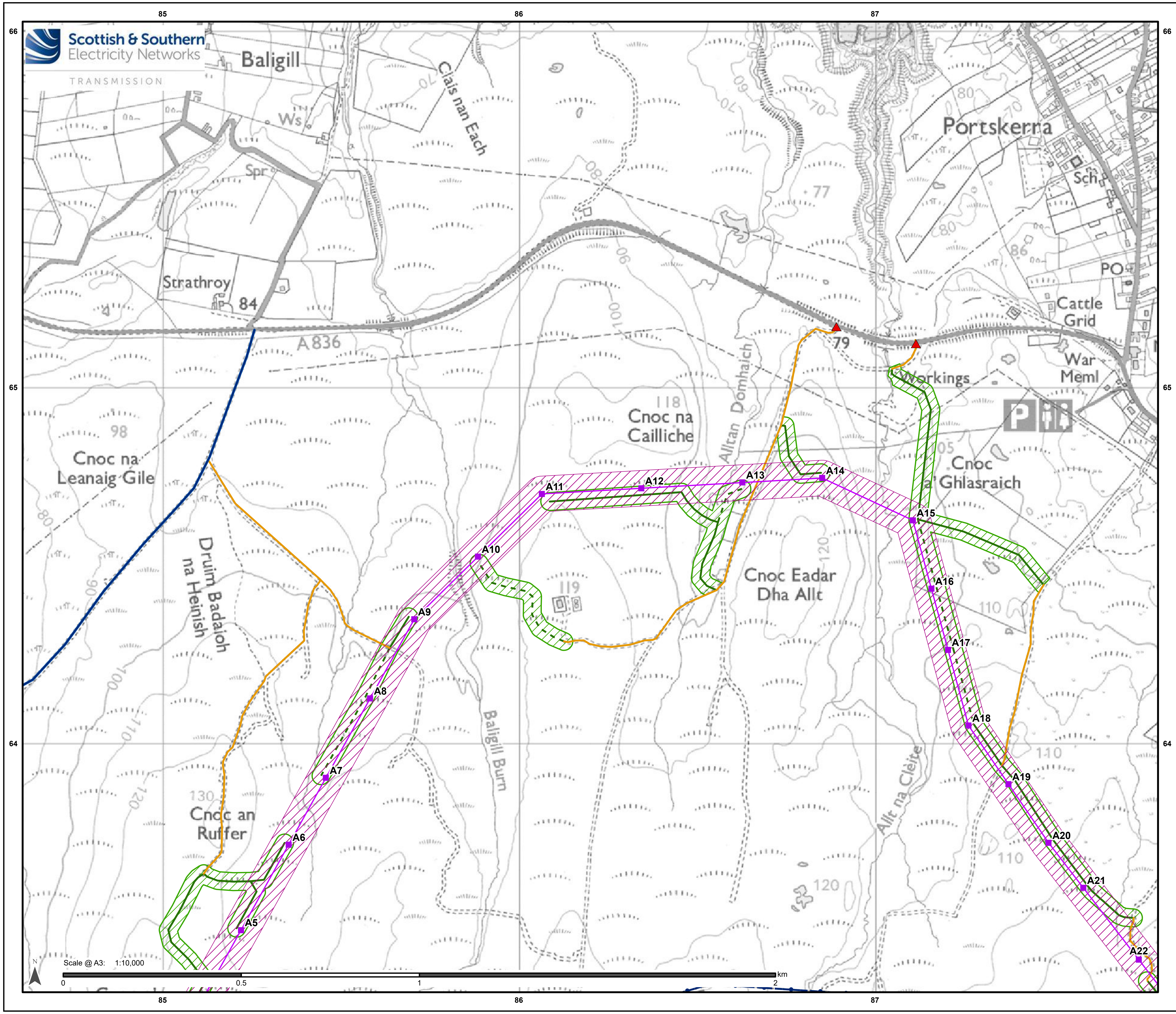
Title:

Figure V5-7.2.2- Site Layout
Alternative Alignment
Map 2

Drawn by: MM

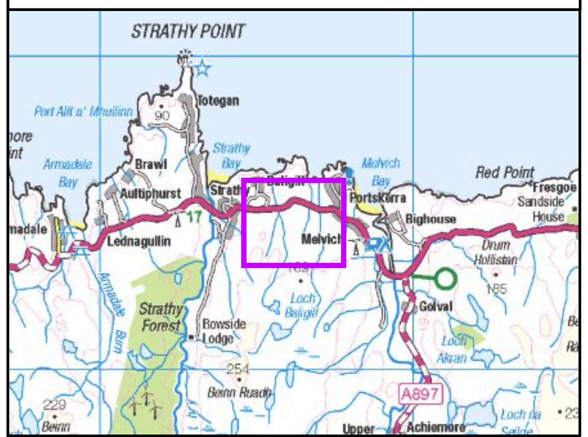
Date: 23/01/2025

Drawing: 428.013137.00001.00062.0

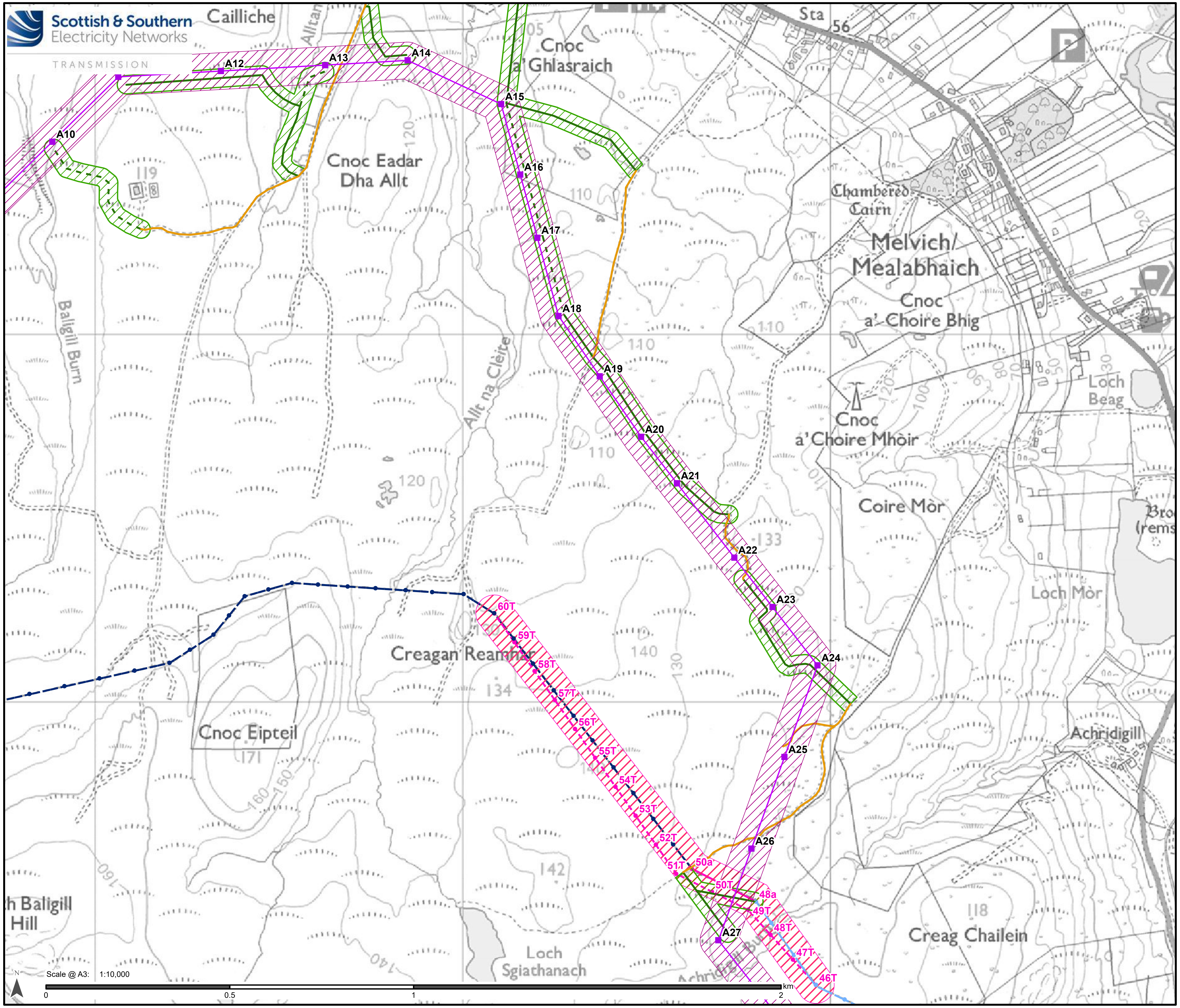


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Bellmouth (To Be Upgraded)
- Existing Access Track
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be dismantled)
- Existing Wood Pole (H pole) (to be dismantled)

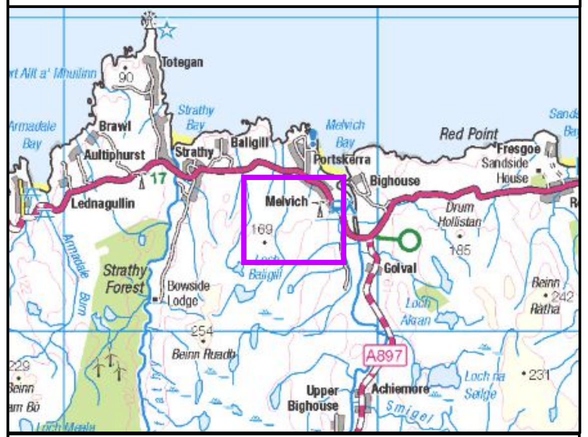


Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.2- Site Layout Alternative Alignment Map 3
Drawn by:	MM — Date: 23/01/2025
Drawing:	428.013137.00001.00062.0

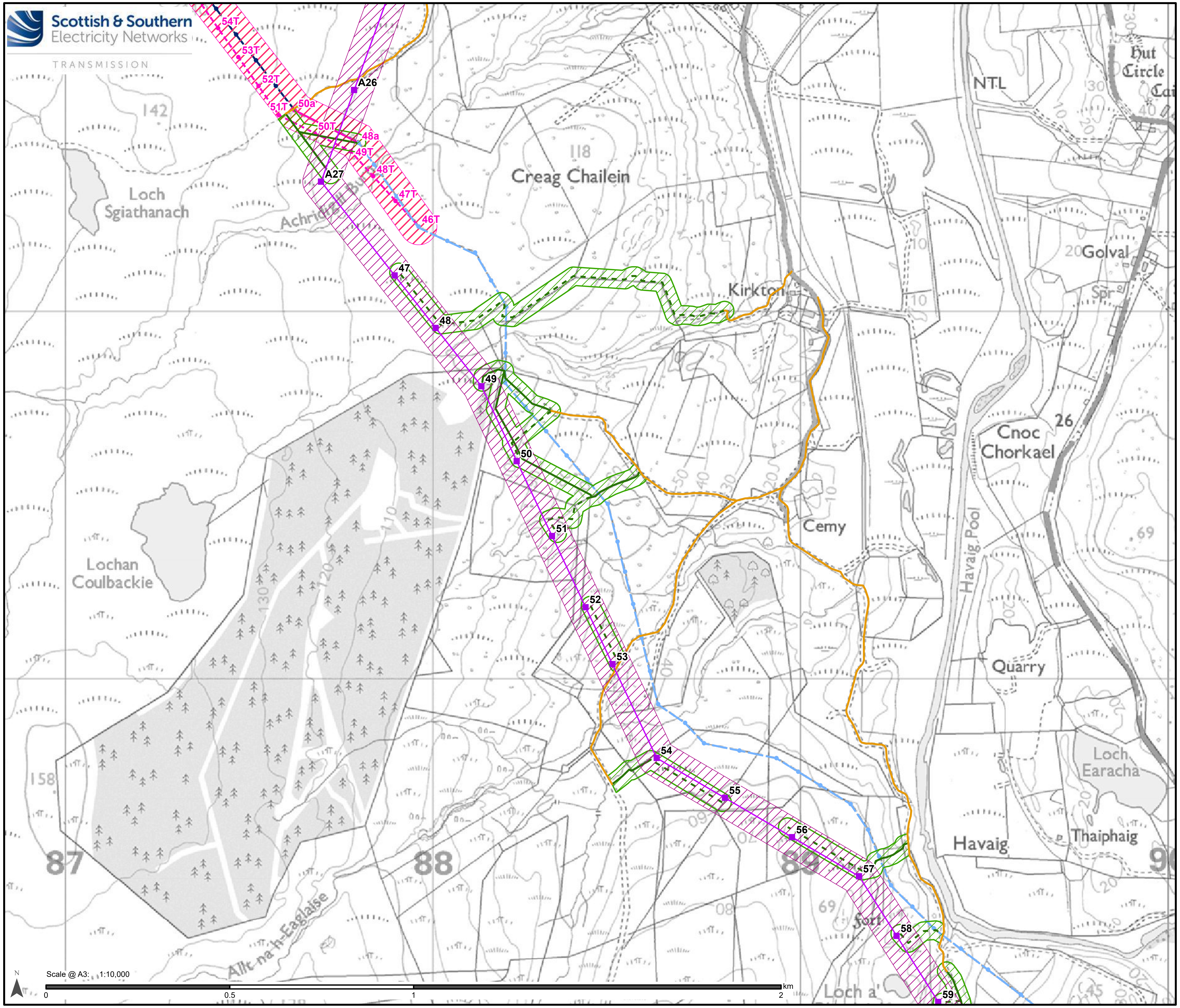


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Existing Wood Pole (H pole) (to be dismantled)
- Temporary Wood Pole (H pole)
- Proposed Temporary OHL
- Limit of Deviation (Temporary OHL)
- Temporary UGC Alignment
- Existing Wood Pole (H pole) (to be dismantled)

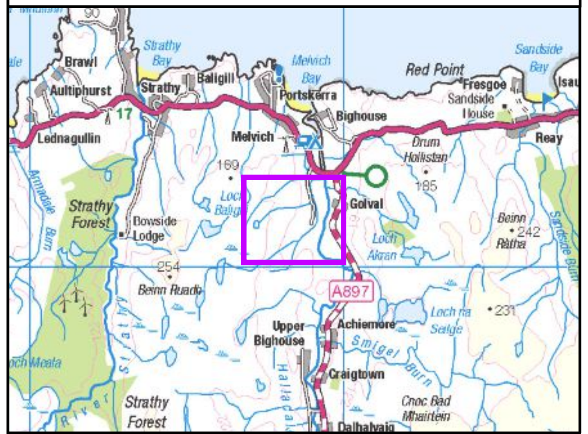


Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.2- Site Layout Alternative Alignment Map 4
Drawn by:	MM
Date:	23/01/2025
Drawing:	428.013137.00001.00062.0

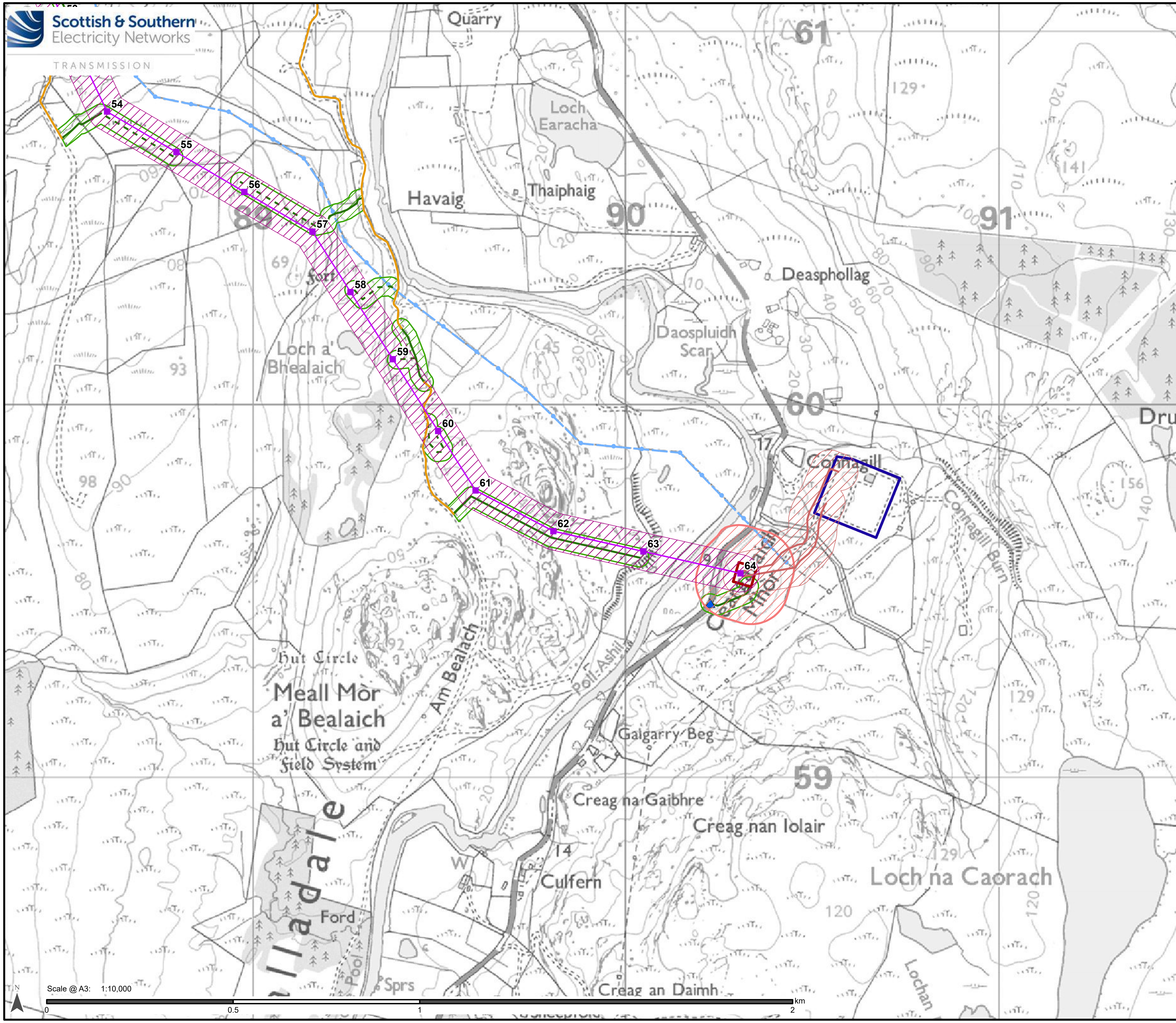


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Existing Wood Pole (H pole) (to be dismantled)
- Temporary Wood Pole (H pole)
- Proposed Temporary OHL
- Limit of Deviation (Temporary OHL)
- Temporary UGC Alignment
- Existing Wood Pole (H pole) (to be dismantled)

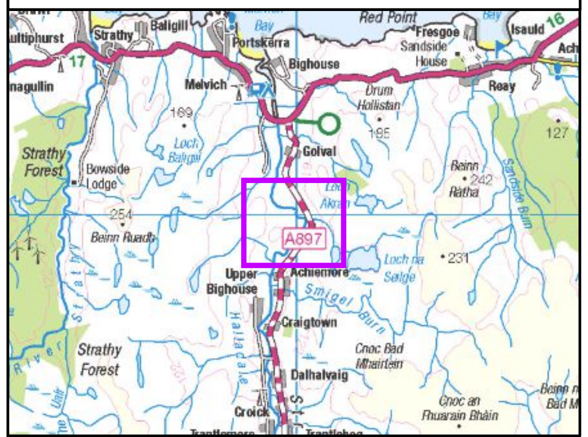


Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.2- Site Layout Alternative Alignment Map 5
Drawn by:	MM Date: 23/01/2025
Drawing:	428.013137.00001.00062.0

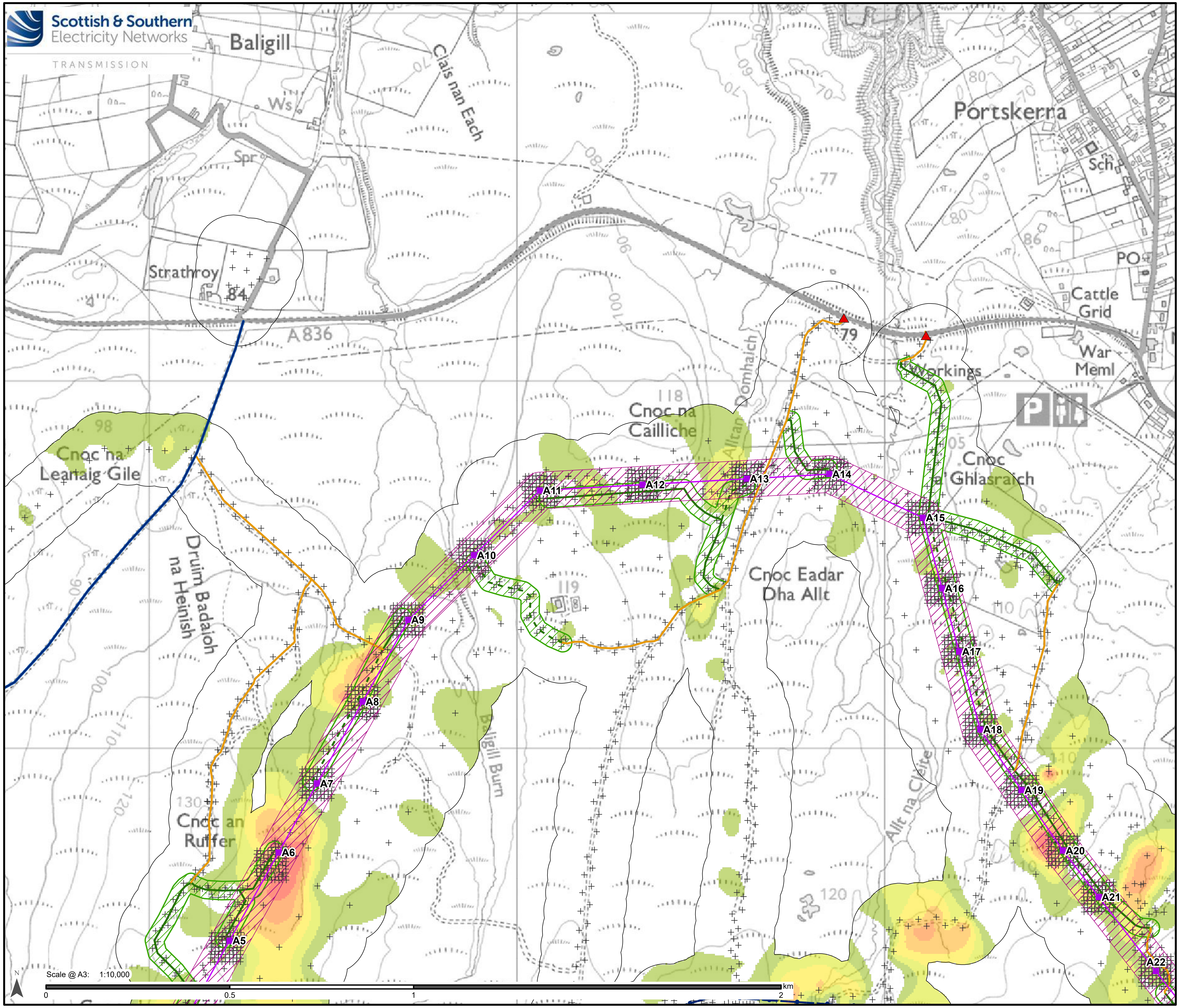


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Proposed Underground Cable (UGC)
- Limit of Deviation (UGC)
- Proposed Cable Sealing End (CSE) Compound
- Limit of Deviation (CSE Compound)
- New Bellmouth
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Connagill 275/132 kV Substation



Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.2- Site Layout Alternative Alignment Map 6
Drawn by:	MM — Date: 23/01/2025
Drawing:	428.013137.00001.00062.0

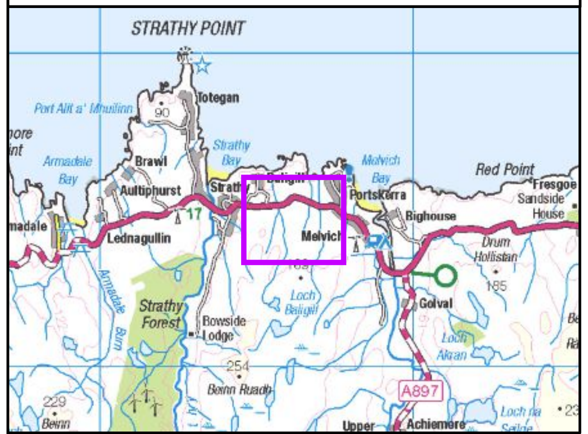


Legend

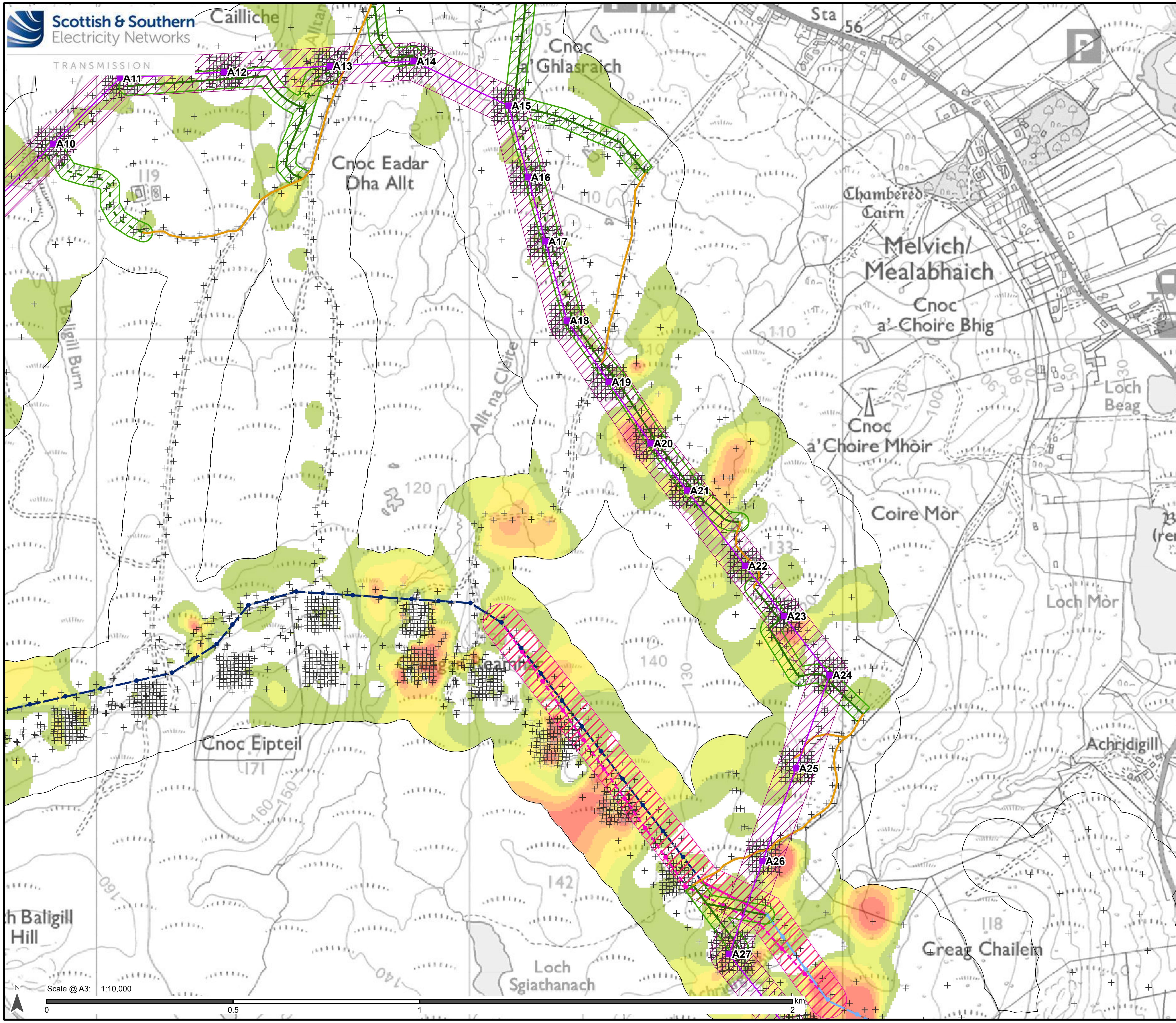
- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Bellmouth (To Be Upgraded)
- Existing Access Track
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be dismantled)
- Existing Wood Pole (H pole) (to be dismantled)
- Peat Probe Location

Peat Depth (m)

- 0.5 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 2.5
- 2.5 - 3
- > 3



Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.3 - Peat Depth > 0.5 m Alternative Alignment Map 3
Drawn by:	MM
Date:	20/01/2025
Drawing:	428.013137.00001.00068.0

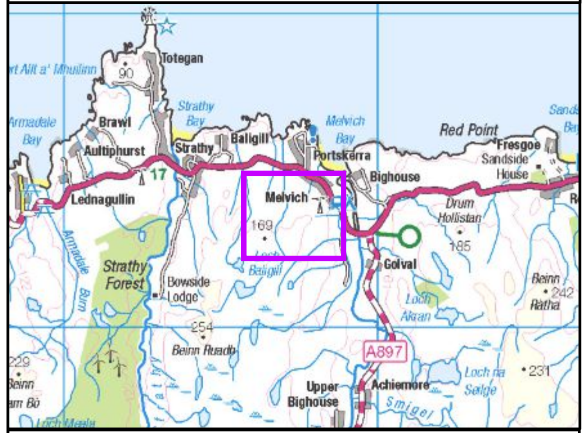


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Existing Wood Pole (H pole) (to be dismantled)
- Temporary Wood Pole (H pole)
- Limit of Deviation (Temporary OHL)
- Proposed Temporary OHL
- Temporary UGC Alignment
- Existing Wood Pole (H pole) (to be dismantled)
- Peat Probe Location

Peat Depth (m)

- 0.5 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 2.5
- 2.5 - 3
- > 3



Project No: LT560

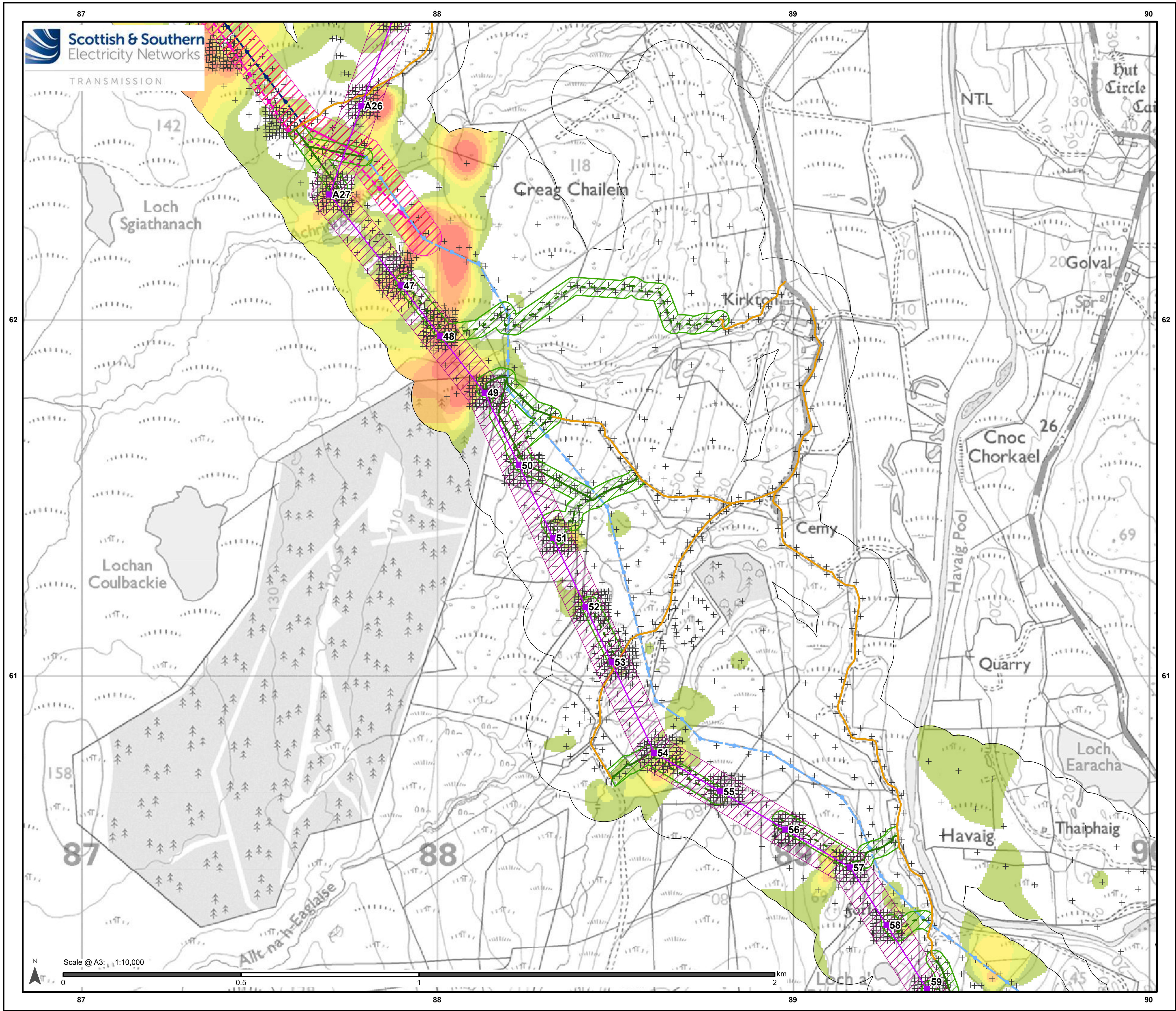
Project: Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan

Title: Figure V5-7.2.3 - Peat Depth > 0.5 m Alternative Alignment Map 4

Drawn by: MM

Date: 20/01/2025

Drawing: 428.013137.00001.00068.0

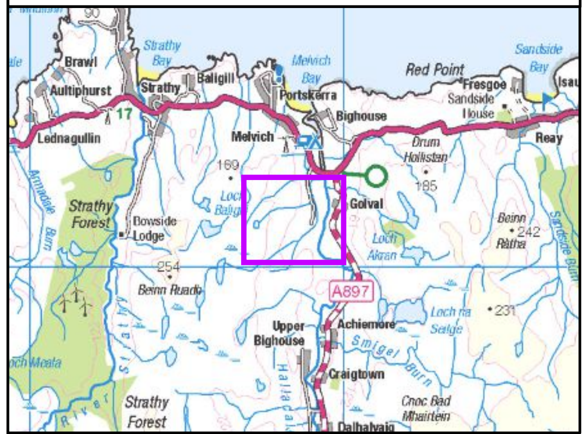


Legend

- Alternative Steel Lattice Tower
- Alternative OHL Alignment
- Limit of Deviation (Alternative OHL)
- Existing Access Track (to be upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Limit of Deviation (Access Track)
- Existing Wood Pole (H pole) (to be retained)
- Existing OHL (to be retained)
- Existing Wood Pole (H pole) (to be dismantled)
- Temporary Wood Pole (H pole)
- Limit of Deviation (Temporary OHL)
- Proposed Temporary OHL
- Temporary UGC Alignment
- Existing Wood Pole (H pole) (to be dismantled)
- Peat Probe Location

Peat Depth (m)

- 0.5 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 2.5
- 2.5 - 3
- > 3



Project No:	LT560
Project:	Strathy South Wind Farm Grid Connection EIA Report - Peat Management Plan
Title:	Figure V5-7.2.3 - Peat Depth > 0.5 m Alternative Alignment Map 5
Drawn by:	MM
Date:	20/01/2025
Drawing:	428.013137.00001.00068.0