

TRANSMISSION

VOLUME 4: APPENDIX V1-9.2: OUTLINE PEAT MANAGEMENT PLAN (PMP)



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Strathy South Wind Farm Grid Connection

Volume 4: Appendix V1-9.2: Stage 1 Outline Peat Management Plan

SSEN Transmission

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Making Sustainability Happen

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Table of Contents

Basi	s of Report	i
1.0	Introduction	4
1.1	General	4
1.2	The Proposed Alignment	4
1.3	Objectives	4
1.4	Role of the Peat Management Plan	4
1.5	Legislation and Guidance	5
2.0	Baseline Conditions	8
2.1	Definition of Peat	8
2.2	Topography	8
2.3	Peatland Classification	9
2.4	Hydrology	9
2.5	Hydrogeology	10
2.6	Sensitive Receptors	10
2.6.1	Groundwater Dependent Terrestrial Ecosystems (GWDTE)	10
3.0	Fieldwork	11
3.1	Peat Surveys	11
3.2	Peat Depth	11
3.2.1	Peat Deposits	12
3.3	Physical Peat Condition	13
3.4	Substrate	13
3.5	Acrotelmic and Catotelmic Layers	14
4.0	Peat Management and Mitigation	15
4.1	Excavation	15
4.2	Re-use	16
4.3	Storage	16
4.4	Transport	17
4.5	Handling	17
4.6	Peatland Restoration	17
4.7	Access Track	18
4.8	Monitoring and Inspection	19
5.0	Peat Balance Assessment	20
5.1	Excavated Volumes	20
5.2	Reuse Volumes	20
5.3	Net Peat Balance	20

6.0	Waste Classification	. 22
7.0	Conclusion	. 24

Tables in Text

Table A:	Peat Probing Results	12
Table B:	Peat Coring Results	13
Table C:	Peat Balance Assessment	21
Table D:	Excavated Materials – Assessment of Suitability	23

Figures

Figure V1-9.2.1: Site Location Figure V1-9.2.2: Site Layout Figure V1-9.2.3: Peat Depth over 0.5 m Figure V1-9.2.4: Peat Depth Detailed

Annexes

Annex A Excavated Materials Calculations Annex B Peat Coring Data

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 Proposed Alignment (hereafter referred to as 'the Proposed Alignment'), which is located approximately 3.0 km south of Strathy and Melvich, Sutherland in northern Scotland, see **Figure V1-9.2.1**.

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 Proposed Alignment

The Proposed Alignment comprises approximately 10.5 km of 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) and formation of access tracks (permanent, temporary and upgrades to existing) as shown on **Figure V1-9.2.2**.

Full details of the Proposed Alignment are provided in **Volume 1: Chapter 3: The Proposed Development.**

1.3 Objectives

This Peat Management Plan (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 Proposed 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 Proposed 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 2011⁶;
- 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 NPF4¹is "to protect carbon rich soils, restore peatlands and minimise the disturbance of soils from development".



 $¹ Scottish \ Government (2023). https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2022/11/national-planning-framework-4-revised-intervi$

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

SEPA³ 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 Peat⁹



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 Geoindex¹⁰, the topography across the Proposed 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 Proposed Alignment exhibits moderate to steep slopes in the western extents which climb towards the east before reaching a peak of approximately 150 m AOD near Tower 39 in the central areas. The Proposed 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 Proposed Alignment, particularly between Towers 41 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 2016¹¹ indicates that approximately 6.1 km and 3 km of the proposed OHL alignment is located within an area of Class 1 and Class 2 peatland respectively. Class 1 and 2 peatland are considered nationally important carbon-rich soils, deep peat and priority peatland habitat with areas likely to be of high conservation value. In addition, Class 2 peatland is considered to be of high restoration potential.

There are areas of Class 1 peat mapped in the western extents of the Proposed Alignment, at proposed Towers 19, 20 and 22. In addition, there are areas of Class 1 peat mapped across the majority of the northern areas of the Proposed Alignment including at Tower 26, between Towers 29 and 32, between Towers 35 to 39, Towers 41 to 49 and at Tower 54.

The remainder of the Proposed Alignment is mapped as Class 5 peatland with a very localised area of Class 3 peatland mapped in the western extents of the Proposed Alignment adjacent to the River Strathy and Tower 19.

Class 3 peatland is not considered priority peatland habitat, however, most of the soils are carbon-rich and areas of deep peat may be present. Class 5 peatland is not associated with peatland habitats, but soils are carbon-rich and deep peat may be present.

Peat and peat soils throughout and surrounding the Proposed Alignment have been used intensively over the past century. Across the Proposed Alignment, sheep 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 Proposed Alignment. In addition, the east of the Proposed 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 V1-9.5.

2.4 Hydrology

The Proposed Alignment is located within three main surface water catchments: the River Strathy to the west, the Halladale River surface water catchment to the east, and the Tongue Coastal catchment to the north. The Proposed Alignment crosses over the Halladale River at NGR NC 90230 59519, between Tower 63 and 64.

The Proposed 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 Study Area. The burn flows generally westwards before discharging into the River Strathy approximately 420 m downstream of the Proposed Alignment. The Proposed Alignment would cross the burn at NGR NC 83133 60994 (between towers 21 and 22 (no track is proposed to cross the burn) and poles associated with the existing 132 kV OHL would be dismantled within this catchment; and,
- Allt na n Eaglaise sub catchment of the Halladale River which drains a large area to the south and south-east of the Study Area. Allt ne n Eaglaise flows generally northwards, through the eastern extent, before discharging into the Halladale River approximately 680 m downstream of the Study Area. The Proposed Alignment would cross Allt na n Eaglaise at NGR NC 88565 60876 (between towers T53 and T54). There are several tributaries of Allt na n Eaglaise within the Proposed 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 map¹² indicates that the Proposed 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 Proposed Alignment, in the east underlying Towers 21 to 28, and throughout the north and east from Towers 40 to 53. 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 Proposed Alignment, between Towers 29 and 39.

2.6 Sensitive Receptors

Review of NatureScot Sitelink confirms that approximately 250 m of the Proposed Alignment 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 Proposed Alignment is also located within the northern extent of the Flow Country World Heritage Site. Assessment is detailed within **Volume 4: Appendix V1-7.7**.

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 1: Chapter 7: Ecology**.

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 Proposed 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 coordinates 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 mError! **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 V1-9.2.3** and V1-**9.2.4** detail the interpolated peat depth across the Proposed Alignment 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 Proposed 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 Proposed Alignment, deep peat of up to 2 m was recorded within the area of Towers 32 - 35, with most peat depths ranging from 1 to 1.5 m.

Deep peat up to 2.5 m was encountered within the area of Tower 41 with a shallowing of peat depths towards Tower 39 where steeper slopes are present. Towards the eastern extends of the Proposed Alignment peat depths of over 2 m were recorded at Towers 43 and 44 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 Proposed 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 within the Proposed Alignment.

Areas of localised of deeper peat were recorded at the permanent access track north-east of Tower 32 and the temporary access track to the east towards Tower 35.

Localised areas of deeper peat were recorded at the existing access track (to be upgraded) north of Tower 42 and with sections of permanent track at Tower 43, 44 and sections of temporary access track between Towers 45 to 46 and between 47 and 48.

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.

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.

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

Table A: Peat Probing Results

Peat Thickness (m)	No. of Probes	Percentage (of total probes undertaken on-site)
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 Proposed 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 Proposed Alignment. Peatland condition is detailed further in **Volume 4: Appendix V1-7.3: Habitat Technical Report**.

Peat is described using BS5930¹³ and the Von Post classification¹⁴. 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.

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

Table B: Peat Coring Results

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

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.

• 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 Proposed 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.

4.0 Peat Management and Mitigation

The design of the Proposed 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 Proposed 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 Proposed Alignment cannot avoid based on other design constraints (see **Volume 1: Chapter 2: The Routeing Process and Alternatives**).

The initial construction phase for the Proposed Alignment will include soil and peat stripping and excavation activities associated with construction of the Proposed Alignment. 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 Proposed Alignment, as set out in **Volume 4: Appendix V1-7.8: 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 Proposed Alignment to restore peatland. The proposals for peatland restoration are detailed within **Volume 4: Appendix V1-7.8: 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 Proposed 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.

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 Proposed 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 ECoW 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 Proposed 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 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 Proposed 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 Proposed 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 (m³)
Permanent Access Track	31,181	35,978
Temporary Access Track	7,844	7,844
Existing Access Track (to be upgraded)	4,517	4,517
Underground Cable (UGC)	5,172	5,172
Cable Sealing End (CSE)	844	110
Towers	107,059	107,059
Total	156,615	160,678

The indicative total volume of peat predicted to be excavated of 156,615 m³, does not exceed the intended total peat reuse volume of 160,678 m³, therefore no excess peat is required to be disposed off-site as a consequence of the Proposed 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 2011¹⁵.

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



Excavated Material	Indicative Volume % of total excavated soils	ls 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.

Table D: Excavated Materials – Assessment of Suitability

*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 Alignment. The PMP also provides the guiding principles which would be applied during the construction of the Proposed Alignment. Peat depth surveys have shown that there are localised peat deposits across the Proposed Alignment.

Through a process of continued design refinement (focused on minimising peat excavation volumes) and adoption of best practice working methods, the Proposed 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 Proposed 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: Appendix V1-9.2: Stage 1 Outline Peat Management Plan

SSEN Transmission

SLR Project No.: 428.013137.00001_04













Annex A Excavated Materials Calculations

Strathy South Wind Farm Grid Connection

Volume 4: Appendix V1-9.2: Stage 1 Outline Peat Management Plan

SSEN Transmission

SLR Project No.: 428.013137.00001_04

					(Total Excavated	Total Excavated							Total Re-use	Total Re-use		
Infeature	Longth (m)	Midth (m)	A	Average Depth	1	Volume	Volume	Total Excavated	Longth (m)	Width (m)	A	Average Depth	Number	Volume	Volume	Total Re-use	Notes
initiasti decidi e	Lenger (III)	widdi (iii)	Area (m)	(m)	Number	Acrotelm Peat	Catotelm Peat	Volume (m ³)	Lenger (III)	widen (iii)	Area (m)	(m)	Number	Acrotelm Peat	Catotelm Peat	Volume (m ³)	Notes
						(m ²)	(m ³)							(m ²)	(m ²)		
Permanent Access Track - Construction width 6.5m Operation Width 5m.	7380	6.5	47970	0.65	1	23985	7196	31181	7380	3.75	27675	0.65	2	27675	8303	35978	Re-use 3m either side of cut track. 1.5m reinstated to reduce construction width from 6.5m to 5m
Temporary Access Track	5810	5	29050	0.27	1	7844		7844	5810	5	29050	0.27	1	7844		7844	To be fully reinstated.
Existing Access Track (to be upgraded)	13687	1.5	20530	0.22	1	4517		4517	13687	1.5	20530.17	0.22	1	4517		4517	1.5m upgrade fully re-instated.
Underground Cable (UGC)	780	40	31200	0.17	1	5172		5172	780	40	31200	0.17	1	5172			
Cable Sealing End (CSE)	50	55	2750	0.31	1	844		844	220	1	220	0.50	1	110			
Tower 19	70	70	4900	0.90	1	2450	1960	4410	70	70	4900	0.90	1	2450	1960	4410	
Tower 20	50	50	2500	0.41	1	1025		1025	50	50	2500	0.41	1	1025		1025	
Tower 21	70	70	4900	0.38	1	1862		1862	70	70	4900	0.38	1	1862		1862	
Tower 22	50	50	2500	0.35	1	875		875	50	50	2500	0.35	1	875		875	
Tower 23	50	50	2500	0.32	1	800		800	50	50	2500	0.32	1	800		800	
Tower 24	50	50	2500	0.38	1	950		950	50	50	2500	0.38	1	950		950	
Tower 25	50	50	2500	0.42	1	1050		1050	50	50	2500	0.42	1	1050		1050	
Tower 26	70	70	4900	0.41	1	2009		2009	70	70	4900	0.41	1	2009		2009	
Tower 27	50	50	2500	0.28	1	700		700	50	50	2500	0.28	1	700		700	
Tower 28	70	70	4900	0.38	1	1862		1862	70	70	4900	0.38	1	1862		1862	
Tower 29	80	80	6400	0.33	1	2112		2112	80	80	6400	0.33	1	2112		2112	
Tower 30	50	50	2500	0.49	1	1225		1225	50	50	2500	0.49	1	1225		1225	
Tower 31	80	80	6400	0.52	1	3200	128	3328	80	80	6400	0.52	1	3200	128	3328	
Tower 22	50	50	2500	1.54	1	1250	2600	3850	50	50	2500	1 54	1	1250	2600	3850	
Towar 33	50	50	2500	1.05	1	1250	1375	2625	50	50	2500	1.05	1	1250	1375	2625	
Tower 34	50	50	2500	0.47	1	1175		1175	50	50	2500	0.47	1	1175		1175	
70467-25	50	50	2500	1 39	1	1250	2225	3475	50	50	2500	1 39	1	1250	2225	3475	
Towar 36	50	50	2500	1.02	1	1250	1300	2550	50	50	2500	1.02	1	1250	1300	2550	
Towar 37	50	50	2500	0.60	1	1250	250	1500	50	50	2500	0.60	1	1250	250	1500	
	50	50	2500	0.15	1	375		375	50	50	2500	0.15	1	375		375	
Tower 30	80	80	6400	0.23	1	1472		1472	80	80	6400	0.23	1	1472		1472	
Tower 40	80	80	6400	0.44	1	2816		2816	80	80	6400	0.44	1	2816		2816	
Tower 40	80	80	6400	0.21	1	1344		1344	80	80	6400	0.44	1	1344		1344	
	50	50	2500	0.41	1	1025		1025	50	50	2500	0.41	1	1025		1025	
Tower 42	50	50	2500	2.52	1	1250	5050	6300	50	50	2500	2.52	1	1750	5050	6300	
Tower 45	80	80	6400	2.52	1	3200	10816	14016	80	80	6400	2.52	1	3200	10816	14016	
Tower 44	50	50	2500	0.59	1	1250	225	1475	50	50	2500	0.59	1	1250	225	1475	
Towers	50	50	2500	1.93	1	1250	2200	4550	50	50	2500	1.93	1	1250	2200	4550	
Tower 40	50	50	2500	1.62	1	1250	2275	3625	50	50	2500	1.02	1	1250	2375	3625	
Tower 49	50	50	2500	2.45	1	1250	5525	6775	50	50	2500	2.45	1	1250	5575	6775	
Tower 40	80	80	6400	0.53	1	3200	197	3397	80	80	6400	0.53	1	3200	197	3392	
Tower 45	50	50	2500	0.11	1	275	152	275	50	50	2500	0.11	1	275	1.52	275	
Tower SU	50	50	2500	0.11	1	£73		2/3	50	50	2500	0.11	1	500		2/3	
Tower 51	50	50	2500	0.20	1	075		075	50	50	2500	0.20	1	075		075	
Tower 52	50	50	2300	0.39	1	373		3/3	50	50	2300	0.35	-	373		373	
Tower 53	50	50	2500	0.14	1	350	449	300	50	50	2500	0.14	1	330	449	300	
Tower 54	50	50	3500	0.37	1	5200	440	5040	50	50	2500	0.37	1	5200	440	5040	
10Wer 55	50	50	2300	0.22	1	530		530	50	50	2300	0.22	1	530		530	
Tower 5b	50	50	2500	0.21	1	525		525	50	50	2500	0.21	1	525		525	
lower 5/	80	80	6400	0.24	1	1536		1536	80	80	6400	0.24	1	1536		1536	
Tower 58	50	50	2500	0.26	1	050		650	50	50	2500	0.26	1	050		650	
10wer 59	50	50	2500	0.10	1	250		250	50	50	2500	0.10	1	250		250	
Tower bu	50	50	2500	0.13	1	325	6503	325	50	50	2500	0.13	1	325	6503	325	
lower b1	80	80	6400	1.53	1	3200	0092	9/92	80	80	6400	1.53	1	3200	0592	9/92	
Tower 62	80	80	6400	0.21	1	1344		1344	80	80	6400	0.21	1	1344		1344	
Tower 63	50	50	2500	0.23	1	575		575	50	50	2500	0.23	1	575		575	
Tower 64	80	80	6400	0.19	1	1216		1216	80	80	6400	0.19	1	1216		1216	
Totals						105059	51557	156615						108015	52664	160678	

Total Excavated Volume Acrotelm Peat (m ³)	105059
Total Excavated Volume Catotelm Peat (m ³)	51557
Total Excavated Volume Peat (m ³)	156615
Total Re-use Volume Acrotelm Peat (m ³)	108015
Total Re-use Volume Catotelm Peat (m ³)	52664
Total Re-use Volume of Peat (m ²)	160678
Net Balance (m ²)	-4063

Annex B Peat Coring Data

Strathy South Wind Farm Grid Connection

Volume 4: Appendix V1-9.2: Stage 1 Outline Peat Management Plan

SSEN Transmission

SLR Project No.: 428.013137.00001_04

22	SIR			1	Peat Core Log										
Project: S	Strathy South Win	d Farm Grid	Connection	Client: SSEN				Dates:	03-10-2024						
Project N	lo: 428.013137.00	0001_04		Logger: ET		Approv	ved By: A	Н	Coordinates:	E: 289647.00	N: 959767.00				
Location:	Sutherland			Hole Type: PC		Level:			Vertical Scale:	1:26					
Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (n Discontinuity	n) / / Detail	Level (mAOD)	Legend	St	ratum Descripti	on				
	0.00 - 1.00 - - - - - - - - - - - - - - - - - - -			Recovery = 100%		1.00		sile sile	Dark brown fibrous F Dark brown pseudo-	PEAT (H2, B2). fibrous PEAT (H3,	B2).	1			
	1.00 - 2.00 - 2 -			Recovery = 85%				Alle alle alle alle alle alle alle alle a				2 ·			
	2.00 - 3.00 -			Recovery = 100%				A silic sili				3 ·			
	3.00 - 4.00 -					4 00		 alte alte, alte alte, alte alte, alte, alte							
				Recovery = 90%				<u>SM4</u> <u>SM4</u> S	Per	at Core Complete at 4.0	00m	4 -			

Remarks:

쑸	SLR		Hole No. PC02							
Project: Strathy South Wind Farm Grid Connection				Client: SSEN				Dates: 03-10-2024		
Project N	lo: 428.013137.00	0001_04	Logger: ET	Logger: ET			Н	Coordinates: E: 288128.	00 N: 961834.00	
Location:	Sutherland		Hole Type: PC	Hole Type: PC				Vertical Scale: 1:26		
Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (Discontinuit	m) / :y Detail	Level (mAOD)	Legend	Stratum Descrip	otion
	0.00 - 1.00			Recovery = 100%		1.00		لذ بالذ	Dark brown fibrous PEAT (H2, B2). Dark brown pseudo-fibrous PEAT (H	I4, B2).
	1.00 - 2.00							Alle alle alle s alle alle alle alle alle alle		
	2 -			Recovery = 100%					Peat Core Complete at	2.00m 2
	4 -									4

Remarks:

									Hole No.			
72	JLK		Peat Core Log									
Project: S	Strathy South Win	d Farm Grid	Client: SSEN					Dates:	Dates: 03-10-2024			
Project N	lo: 428.013137.00	0001_04	Logger: ET	Approved By: AH			Coordinates: E: 288122.0		0 N: 961832.00			
Location: Sutherland				Hole Type: PC	Level:			Vertical Scale:	1:26			
Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (n Discontinuity	ı) / / Detail	Level (mAOD)	Legend	Str	atum Description		
	0.00 - 1.00			Recovery		1.00		shte shte s shte shte shte shte shte	Dark brown fibrous P	ΈΑΤ (H2, B2).		1
	1.00 - 2.00			= 100%					0ark brown pseudo-1	fibrous PEAT (H3, B2).	±
	2.00 - 3.00			Recovery = 90%		2 00						2.
				Recovery = 85%		3.00			Pea	t Core Complete at 3.00m		3 · 4 ·

Remarks:

쑸	SLR			I	Hole No. PC04							
Project: S	trathy South Win	d Farm Grid	Client: SSEN	Client: SSEN					Dates: 03-10-2024			
Project N	o: 428.013137.00	0001_04	Logger: ET	Approved By: AH			Coordinates:	E: 284074.00	D N: 962690.00			
Location: Sutherland				Hole Type: PC		Level:			Vertical Scale: 1:26			
Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (r Discontinuit	n) / y Detail	Level (mAOD)	Legend	Stra	tum Descripti	ion	
	0.00 - 1.00 -			Recovery		0.50		$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Dark brown fibrous PE Dark brown pseudo-fil	AT (H2, B2). Drous PEAT (H3,	, B2).	1
	1.00 - 2.00			= 90%								
	2.00 - 3.00			= 90%				 alle alle alle alle alle alle alle alle alle a				2
	3 - - 4 -			Recovery = 100%		3.00		te ante ante	Peat r	Core Complete at 3.0	00m	4.
	-											5

Remarks:

Making Sustainability Happen