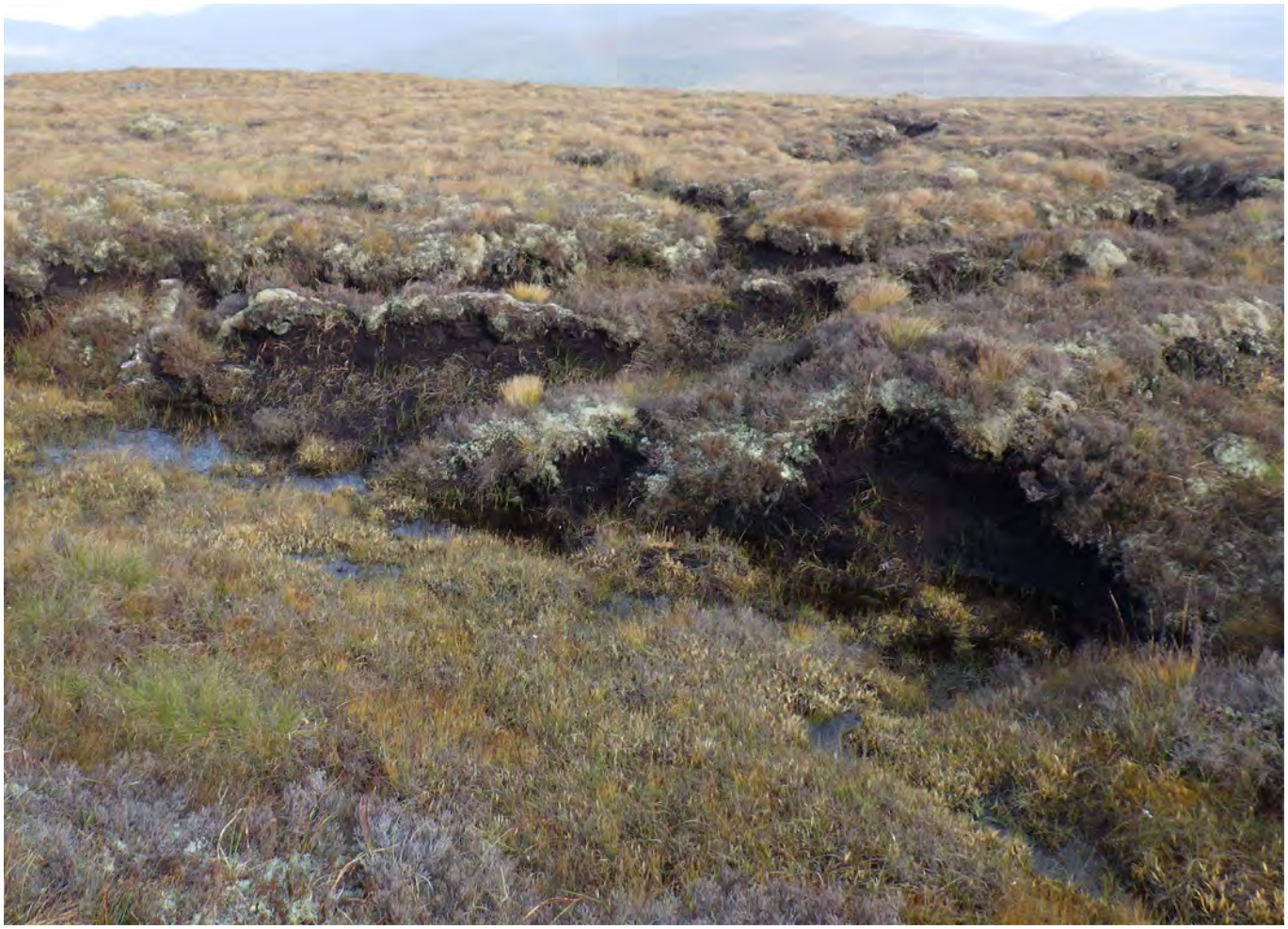

Earraghail RED

Earraghail Renewable Energy Development: Outline Peat Management Plan

Technical Appendix 10.2

FEBRUARY 2022

RSK GENERAL NOTES

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CONTENTS

TABLES

FIGURES

1 INTRODUCTION

1.1 This report provides an Outline Peat Management Plan for Earraghail Renewable Energy Development ('the proposed Development') and associated development infrastructure.

1.2 The report forms a Technical Appendix to the Environmental Impact Assessment (EIA) Report for the proposed Development and should be read in conjunction with this document. It has been produced to address the requirement for excavation of peat and peaty soils during the wind farm construction process.

1.3 This report will consider total volumes of peat that need to be excavated and will set out options for reuse of the excavated material. Guidance on management and handling of excavated peat and soils will be provided.

1.4 For the purposes of this appendix, the study area is considered to include the application boundary and a buffer zone of 250 m from this boundary. The main focus is on areas where construction works are proposed.

Site Location

1.5 The Site is located between the village of Tarbert, to the north east, and the village of Skipness, to the south, situated within the northern part of Kintyre Peninsula in Argyll & Bute council and administrative area – centred on National Grid Reference (NGR) NR 88732 63637. The Site is owned by Forestry and Land Scotland (FLS). The Site lies primarily lies within the Corranbuie and Skipness coniferous woodland plantations and is located within an area of carbon-rich soils. The Site area is 1,455 hectares (ha) in total and the current land use is classified as primarily forestry with some moorland.

1.6 The topography of the Site is variable and undulating and is dictated by seven small hills within the forested areas. Between the hills, the land is generally less than 14% slope, with the exception of some land in the north Corranbuie forest area and throughout the south west of the Skipness forest area.

Development proposals

1.7 The proposed Development includes the following key elements:

- 13 wind turbines, up to 180 m to blade tip, including foundations and aviation lighting;
- ground mounted solar arrays;
- BESS units;
- crane hardstandings for wind turbine installation;
- transformer/switchgear housings located adjacent to turbines & solar arrays;
- new (10.4 km) and upgraded (12.9 km) access tracks including watercourse crossings where necessary, passing places and turning heads;
- underground electrical cabling;

- compound containing substation, control building and BESS;
- one main site construction and maintenance compound and a security compound;
- a permanent lattice construction meteorological mast, up to 105 m high;
- health & safety and other directional site signage;
- search areas for three new borrow pit areas; and
- additional development components to improve the overall ecological, environmental and social benefits accruing from the proposed Development, as follows:
    - ecological and environmental: peatland restoration; habitat improvement; native woodland planting
    - social: proposed new walking bothy on the Kintyre Way; circular walking route and viewpoint near Tarbert.

1.8 Full details of the project design are provided in **Chapter 3** of the EIA Report.

Aims

1.9 This report aims to undertake a review of all available peat depth information for the Site and immediate environs, and to provide a series of calculations determining the estimated volumes of peat that will require to be excavated in order to allow the proposed Development to progress. Options will be provided to address use of the excavated peat within necessary restoration of site infrastructure. A series of good practice measures relating to peat and soil handling and storage will also be provided.

Assessment method

1.10 The assessment has involved the following stages:

- Desk study;
- Peat depth surveys and infrastructure design;
- Volume calculations for excavation and reuse; and
- Peat handling and storage guidance.

2 PEAT CONDITION

Developments on peat

Definition of peat

2.1 Scotland's Soils (2021) classifies peat as:

> *"An accumulation of partially decomposed organic material, usually formed in waterlogged conditions. Peat soils have an organic layer more than 50 cm deep from the soil surface which has an organic matter content of more than 60%."*

2.2 Organic soils which are less than 50 cm thick can also support peatland vegetation and as a result are also considered within Scotland's broader peatland system in Scotland's National Peatland Plan (NatureScot, 2015). These are often described as 'peaty gleys' or 'peaty podzols', reflecting key aspects of the underlying soil. Peaty soils have a higher plant fibre content and are less decomposed than peat, and as such have a lower sensitivity to excavation and reuse; however, they remain important within Scotland's peatland habitats and require sensitive handling.

2.3 Active peatland typically consists of two layers: the surface layer or *acrotelm* and the deeper layer or *catotelm*. The acrotelm contains the living vegetation and consists of living and partially decayed plant material. It typically has a low but variable hydraulic conductivity and allows some through-flow of water within the plant material. The underlying catotelm is denser, with a very low hydraulic conductivity, and is formed from older decayed plant material. The catotelm varies in structure, in some areas retaining a proportion of fibrous material and in other areas being more humified and amorphous. The degree of humification typically increases with depth.

2.4 Underneath the peat-forming layers, the basal substrate can be a mineral soil, a superficial deposit such as glacial material, or bedrock. There may be a transition zone through a mineral-rich peaty layer at the base of the peat, although this is usually no more than 5 cm in thickness.

Importance of peat

2.5 Peatland forms a key part of the Scottish landscape, covering more than 20% of the country's land area, and forming a significant carbon store (Scotland's Soils, 2019). In addition, peatland is an internationally important habitat.

2.6 Active and healthy peatlands develop continuously, removing carbon dioxide from the atmosphere and storing it within the peat soil. Peatland protection and restoration form key parts of the Scottish Government's Climate Change Plan, which targets restoration of 50,000 hectares (ha) of degraded peatland by 2020 and 250,000 ha by 2030 (Scottish Government, 2018).

2.7 It is therefore important that developments in upland areas, where peat is most likely to be encountered, take recognition of the importance of peatland as a habitat and carbon store. Careful planning of developments, and careful infrastructure design, can remove

or minimise the disturbance of peat that would be needed to allow the proposed Development to proceed.

Project setting

Topography and geomorphology

2.7.1 The local geomorphology is variable and undulating, with cliffs along the north-east coast of the Kintyre peninsula. The study area lies on relatively high ground, with elevations reaching more than 300 m above Ordnance Datum (AOD). Across the study area, elevations range from sea level along the coast to 377 m AOD towards the middle of the study area at Cruach Doire Lèithe.

2.7.2 The study area is located across a dissected plateau surrounded by sloping ground to lower areas and the coast. The main plateau area is characterised by a series of notable hills with summits between 237 and 377 m AOD, and a large number of smaller rocky hills, with a distinctive north-east to south west lineation visible in aerial imagery. Between the hills, the land is generally less than 14% slope, with the exception of some land in the north Corranbuie forest area and throughout the south west of the Skipness forest area.

2.7.3 The north eastern margin of the plateau area falls off steeply to the coastline. The slope is relatively smooth with numerous small watercourses providing drainage to this section. Slopes in the north western and southern margins are comparatively steep.

2.7.4 The south western margin of the study area is less defined, as the plateau area continues beyond this area. Part of the south-western margin, in the southern part of the study area, contains steep slopes in the section around the Skipness River valley.

2.7.5 Proposed infrastructure is largely confined to areas with relatively gentle slopes for practical reasons, although the topography within the Site is undulating and varied on a local scale. Notably steep slopes have been avoided.

Habitats and vegetation

2.8 The majority of the study area is under coniferous forestry plantation with some areas of recently felled woodland present within Skipness Forest. Smaller areas of seminatural broadleaved woodland are present, mostly within Corranbuie Forest particularly around the access track.

2.9 Open areas and rides within the plantation areas are predominantly a mosaic of wet modified bog, wet dwarf shrub heath and dry dwarf shrub heath.

2.10 National vegetation classification (NVC) survey mapping of the remaining areas indicates that there are four main communities present:

- H12 – *Calluna vulgaris* – *Vaccinium myrtillus* heath;
- M19 – *Calluna vulgaris* – *Eriophorum vaginatum* blanket mire;
- M23 – *Juncus effusus/acutiflorus* – *Galium palustre* rush pasture;
- M25 – *Molinia caerulea* – *Potentilla erecta* mire

2.11 The open central area between Skipness and Corranbuie forests is predominantly covered by H12 and M19, with smaller areas of M25 widespread, and three small areas of M23 associated with the upper reaches of the Allt Chapull-cloiche.

2.12 NVC survey mapping within the Development area identified M19 and smaller areas of M23, generally associated with watercourses.

Hydrology

2.12.1 The project area is located within three main watercourse catchments:

- The Skipness River in the south provides drainage to the majority of the southern part of the project area.
- The Bardaravine River drains the central part of the study area and flows mainly west into West Loch Tarbert.
- The Abhainn Achachoish drains the north-westernmost part of the study area and flows broadly south-west into West Loch Tarbert at Corranbuie.

2.12.2 In addition, approximately 20 small watercourses provide drainage along the eastern side of the study area. These all drain directly to sea.

2.12.3 The catchment wetness index (PROPWET) for the study area catchments is 0.660, indicating the study area is wet for 66% of the time. The area has a relatively low base flow index (BFIHOST19), indicating that groundwater contribution is of limited importance to study area watercourses. The standard percentage runoff (SPRHOST) is relatively high, indicating that 50-55% of study area rainfall is converted into surface runoff from rainfall events. Soils have a limited capacity to store rainfall or to allow water to infiltrate; thus, soils with a high standard percentage runoff will quickly saturate, leading to rapid runoff.

2.12.4 A network of drainage ditches has been excavated throughout the forested areas to encourage drainage. The surrounding areas generally remain boggy underfoot with significant areas of *Sphagnum* growth.

2.12.5 Catchment statistics are derived from the Flood Estimation Handbook Web Service (CEH, 2021).

Peat characteristics

2.13 Within the main part of the Development area, inside Skipness forest, peat development has been disrupted by the commercial forestry operations and is no longer in near-natural condition. The area would formerly have consisted of a patchwork of peaty soils, shallow peat and deeper peat reflecting the underlying topography. Extensive drainage ditches have been excavated, partially draining much of the area. Some areas of relatively extensive deep peat are present, and the waterlogged conditions have caused some restrictions to tree growth particularly in the northern part of the Skipness forest south east of Cruach na Machrach.

2.14 Where recent harvesting and replanting has been carried out the shallow soils have been extensively disturbed. Peat which would have been present at the surface overlying

shallow weathered bedrock is now present as a mixture of structureless peat and pieces of bedrock of various sizes. Additional drainage ditches have been installed and currently provide significant drainage to these areas.

2.15 The open part of the study area, between the Skipness and Corranbuie forest areas, has peat mainly in the form of upland blanket peat with a relatively smooth and undulating surface. Some erosion features were noted in the form of peat hagging where excavation works had been carried out for the access road, a small area of revegetated peat hags close to the summit of Cruach Doire Leithe, and a number of small peat pans. Peat coverage is discontinuous owing to the 'knockan and lochan' character of this area, with many small rocky hills particularly to the east of the access track.

2.16 The Corranbuie forest parcel continues the knockan and lochan character, with peatland often in small and discontinous pockets. The areas of significant slope in this land area have also restricted peat development.

3 PEAT CALCULATIONS

Peat at the Site

3.1 The study area was identified to include areas of peatland at an early stage, as indicated by superficial geology and soils mapping for the region. A broad-scale peat depth survey on a 100 m grid was undertaken by RSK in March and May 2020. The peat depth data from these surveys were used to inform the infrastructure layout design process in May and July 2020.

3.2 A subsequent phase of peat depth surveying was undertaken by RSK in August 2020, focusing on the proposed Development layout. Further minor amendments to the layout to avoid sections of deep peat required a small amount of additional surveying in April 2021 and in January 2022, also undertaken by RSK.

3.3 The combined peat depth data was used to generate a detailed map of peaty soil and peat depth for the project area. This is provided on **Figure 10.1.5** of Technical Appendix 10.1. Measured peat and soil depths range from 0 (bedrock at surface) to 6.2 m (north of Turbine 9). A total of 1,871 peat depth measurements have been recorded for the study area and immediate surroundings.

3.4 The intention has been to avoid peatland areas where possible, and to minimise incursion into peatland where it has not been possible to avoid it altogether. Approximately 64% of the development infrastructure including drainage is underlain by peaty soil or topsoil no greater than 0.5 m deep.

Peat excavation volumes

3.5 The tables below set out the calculated estimated volumes of peat that need to be excavated in order to allow construction to proceed. The calculations are provided per ‘scheme element’, as totals for each element type, and as an overall total. Each set of calculations provides subdivision into ‘acrotelm’ and ‘catotelm’.

3.6 For the purposes of these calculations, the acrotelm has been assumed to form the uppermost 0.5 m where peat is present. Acrotelm is known to vary in thickness, but it is recommended that peat turves are excavated to approximately 0.5 m where possible, including the uppermost part of the catotelm, to promote quicker regeneration of disturbed areas following reinstatement.

3.7 Volumes of peaty soil and topsoil have not been included, in line with the definition of peat quoted above. Soils will also require excavation but are less sensitive than peat to both excavation and restoration.

3.8 **Table 10.2.1** provides peat volumes that require excavation in order to allow construction of the access track network and associated drainage. The volumes include allowance for passing places at an average of one every 500 m and turning heads as necessary at some turbine locations. The track sections are identified on **Figure 10.2.1** and peat volume calculations make use of measured peat depth data for the relevant track section.

Table 10.2.1: Peat excavation volumes for access tracks, including passing places and turning heads, and trackside drainage

Scheme element	Acrotelm (m^3)	Catotelm (m^3)	Total (m^3)
Entrance to hairpin alternative (modified existing)	10,109	5,514	15,623
Hairpin alternative to Skipness Forest (modified existing)	5,504	3,892	9,396
Skipness Forest to T12 (modified existing)	2,483	3,196	5,679
T12 to T02 (modified existing)	2,898	1,844	4,742
Hairpin alternative	2,831	2,611	5,442
T08 access	1,561	1,444	3,005
T12 access	0	0	0
T09 access	1,815	1,416	3,231
T06 to T03/T04 access	6,612	2,834	9,446
T03 to T05 access	3,994	2,618	6,612
T02 to T11 access	834	604	1,438
T01 to T13 access	3,783	2,743	6,526
T13 to T14 access	2,156	1,437	3,593
Total	**44,580**	**30,153**	**74,733**

3.9 **Table 10.2.2** provides peat volumes that require excavation in order to allow construction of the turbine foundations, hardstanding areas and crane pads, plus associated drainage. Calculations have been made for each turbine base plus necessary hardstanding areas, making use of peat depth data for the relevant turbine and hardstanding footprint.

Table 10.2.2: Peat excavation volumes for turbines, hardstandings, crane pads and associated drainage

Scheme element	Acrotelm (m^3)	Catotelm (m^3)	Total (m^3)
Turbine 1	4,437	8,693	13,130
Turbine 2	2,904	3,969	6,874
Turbine 3	3,025	3,328	6,353
Turbine 4	3,112	3,181	6,293
Turbine 5	3,228	2,583	5,811
Turbine 6	1,452	750	2,202
Turbine 7	1,424	2,232	3,656
Turbine 8	1,894	1,957	3,851
Turbine 9	1,844	4,794	6,638
Turbine 11	2,118	2,874	4,992
Turbine 12	1,345	1,049	2,394
Turbine 13	2,305	2,167	4,472
Turbine 14	2,536	1,498	4,034
Total	**30,932**	**39,974**	**70,907**

3.10 **Table 10.2.3** provides peat volumes that require excavation in order to allow construction of additional infrastructure, such as construction compounds, and to allow excavation of the borrow pits, plus associated drainage. The proposed construction compound near the site entrance is not included as there is not expected to be peat at this location. An area of 25 m x 25 m within the proposed potential solar area has been included to allow for a compound area. Calculations have been made for each footprint making use of peat depth data for the relevant infrastructure element.

Table 10.2.3: Peat excavation calculations for other infrastructure elements

Scheme element	Acrotelm (m^3)	Catotelm (m^3)	Total (m^3)
Construction compounds	3,537	5,199	8,736
Borrow Pit 1	614	61	675
Borrow Pit 2	1,785	3,094	4,879
Borrow Pit 3	1,206	362	1,568
Potential solar area compound	74	36	110
Met mast	349	384	733
Total	**7,565**	**9,136**	**16,701**

3.11 A summary of the total peat volumes is provided in **Table 10.2.4**.

Table 10.2.4: Summary of estimated peat excavation volumes

Scheme element	Acrotelm (m^3)	Catotelm (m^3)	Total (m^3)
All tracks	44,580	30,153	74,733
All turbine infrastructure	30,932	39,974	70,907
All other infrastructure	7,565	9,136	16,701
Total	**83,077 (51%)**	**79,263 (49%)**	**162,341**

Peat reuse

3.12 The guidance document '*Developments on Peatland: Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste*' (Scottish Renewables/SEPA, 2012) identifies a number of reuse options for excavated peat within wind farm developments. These have all been tested in practice and found to be effective, if undertaken with care and appropriate handling of the peat.

Dressing off edges of constructed infrastructure

3.13 Excavated peat can provide a valuable means for dressing off and reinstating the slopes and edges of constructed infrastructure. This should be undertaken as soon as practicable after construction and should be undertaken to create a suitable tie-in to the surrounding topography. This has a twofold purpose – to reduce the visual effect of the infrastructure and to retain as much of the existing habitat as possible.

3.14 A secondary part of this would involve full reinstatement of elements of infrastructure only required for the construction phase, principally the additional construction footprint

around the turbine bases. Parts of the turbine hardstandings may also be reinstated following installation of the turbines.

Verge reinstatement on cross-slope tracks

3.15 For areas where cut tracks cross slopes, the downslope margin can be reinstated to form a verge slightly raised above the track level. This acts as a visual screen when looking upslope, and also acts to direct track surface runoff into the trackside drainage on the opposite side, where it can be better directed for treatment.

Verge reinstatement on other track sections

3.16 For cut tracks that do not cross slopes, and for the upslope verge, the track shoulders should be dressed off in a similar manner to the constructed infrastructure, as above.

Borrow pit restoration

3.17 Excavated peat has been used successfully in borrow pit restoration, where the method of reuse and the final restoration profile is in keeping with overall habitat and environmental reinstatement objectives. Care must be taken to ensure that no residual risks from pollution of the environment or harm to human health results from the restoration. Unconsolidated peat may be the most suitable material for this purpose, depending on the local situation. Fencing of the restored area may be appropriate if required to exclude grazing in order to encourage vegetation recovery or to allow stabilisation of the surface until vegetation cover has established.

Peatland restoration

3.18 Peat can provide a valuable material for ditch blocking, as part of a peatland restoration plan on blanket bog. In areas with wider ditches, it may be appropriate to use saturated or unconsolidated peat behind dams in order to speed up the restoration process and regeneration of associated vegetation.

Peat reuse volumes

3.19 Calculations have been made to determine where excavated peat can usefully be reused within the wind farm, for the purposes of reinstatement and restoration. Estimated volumes for reuse are provided in **Table 10.2.5**, subdivided by the different reinstatement and restoration methods that are appropriate for the proposed Development.

Table 10.2.5: Estimated soil and peat volumes for different reuse options

Reuse option	Acrotelm (m^3)	Catotelm (m^3)	Total (m^3)
Dressing off edges of construction infrastructure	9,200	3,900	13,100
Verge reinstatement, upgraded track	38,000	-	38,800
Verge reinstatement, new track	40,000	-	42,000
Borrow pit restoration	12,200	36,000	49,000

Peatland restoration		40,000	40,500
Totals	**99,400**	**79,900**	**183,400**

3.20 All figures provided in **Table 10.2.5** have been rounded down to the nearest 100 m^3, to make allowance for the uncertainties present within the figures.

3.21 It has been assumed that limited catotelmic peat would be reused for dressing off edges and reinstatement of construction infrastructure. In areas with natural hollows, use of some catotelmic peat may be appropriate but it is likely in practice that most of this work would make use of acrotelmic peat.

3.22 It has been assumed that all track verge reinstatement would use entirely acrotelmic peat, although some catotelmic peat may be used in areas with natural hollows.

3.23 Reinstatement and dressing off have assumed a maximum depth of 0.6 m and a maximum width of 2.5 m from the infrastructure or track margin, to be varied in practice as best suits the local ground conditions.

3.24 Approximately 45% of the catotelmic peat would be used for borrow pit restoration, with acrotelm providing a surface layer. Calculations assume that approximately 25% of Borrow Pit 1 and Borrow Pit 2 would remain accessible during the wind farm operation, to provide aggregate for track repair, and for use by FLS. The borrow pits have been designed with a shallow bowl-shaped profile in order to facilitate restoration with available peat from the site, with a restored depth of up to 2 m where appropriate.

3.25 Temporary drainage restoration would involve filling trackside cut-off drains required during the construction phase, plus any other temporary drainage around infrastructure elements. This would make use of some catotelmic peat with a surface acrotelm layer to promote re-establishment of vegetation.

3.26 The balance of excavated peat from the development construction would be used for peatland restoration within the project area boundary Within the project area, peatland identified as potentially suitable for restoration include large areas of Skipness Forest, particularly in the north-west around Turbines 1, 7 and 9, and the south in the area of Turbines 3, 4 and 10. **Technical Appendix 8.5** of the EIA Report indicates areas identified as potential restoration areas within the Site.

4 PEAT HANDLING & STORAGE

Peat excavation

4.1 During the construction of the proposed Development, the Contractor will adopt the following good practice guidelines with relation to peat excavation:

- Where peat conditions are suitable, peat turves will be excavated as intact blocks of the uppermost 0.5 m including the vegetated surface acrotelm layer and the upper part of the catotelm.
- In areas where peat conditions do not allow clean removal of peat turves, the upper layer of peat will be removed as divots or mulch rather than as turves. Careful handling will help to keep the vegetated blocks largely the right way up.
- Underlying peat will be extracted as close to intact as is feasible within the constraints of the site. Remoulding of the peat by the excavator will be kept to a minimum.
- Excavated materials will be classified depending on their composition, and each type will be stored separately. Anticipated material classes are: peaty soils and topsoil, subsoil, acrotelmic peat, catotelmic peat, mineral soil, and rock.
- Excavated peat will be transported as short a distance as practicable for either reuse or temporary storage, in order to minimise loss of structure during transport.

4.2 Peat and soil stripping can be adversely affected by wet weather. The following 'stop' conditions are recommended to guide any peat and soil stripping activity (CH2M & Fairhurst, 2018):

Table 10.2.6: Recommended 'stop' conditions for earthmoving activities

'Stop' rule	Requirements
High intensity rainfall	Rainfall during construction greater than 10 mm per hour
Long duration rainfall	Rainfall in the preceding 24 hours greater than 25 mm
7-day cumulative rainfall (1)	Preceding 7 days of rainfall greater than 50% of the monthly average
7-day cumulative rainfall (2)	Preceding 7 days of rainfall greater than 50 mm

4.3 Monitoring of rainfall for 'stop' conditions would require access to a suitable local source of data, such as the Met Office's monitoring station at Campbeltown Airport, Machrihanish, or a project-specific rainfall station, to allow identification of these conditions being exceeded in order to allow appropriate action to be taken.

Temporary storage

4.4 Temporary storage of peat should be avoided or minimised wherever possible. This is best achieved by transporting the peat to an allocated reuse location as soon as practicable following excavation. This will help to retain its structural integrity as far as

possible, will minimise volumes of peat requiring storage and will help to prevent the peat drying out.

4.5 The Environmental Clerk of Works (ECoW) will maintain a schedule of reuse and restoration areas and will direct whether excavated peat should be stored or transported directly to a suitable reuse location. Immediate reuse is likely to be more practicable in the later stages of construction.

4.6 Soils, peat turves and peat will all be stored separately. The following outline good practice will be applied to all areas of peat and soil storage:

- Excavated materials will not be stored immediately above excavation faces, in order to prevent overburden-induced failure;
- Local drainage lines, areas of very wet ground and locally steep slopes will be avoided for excavated material storage, including peat;
- Peat turves will be stored vegetation-side up;
- Careful handling of upper-layer peat divots, from areas where peat turves cannot be excavated, will help to retain vegetated blocks the right way up;
- Catotelmic peat will stored separately from vegetated peat blocks, in mounds up to 1 m high;
- Limited smoothing or 'blading' of stockpiled catotelm peat, topsoil and subsoil will help to shed rainwater and prevent ponding of water on the stockpile;
- In periods of dry weather, light spraying of the temporary peat stores will be applied in order to minimise drying;
- All temporary storage areas for excavated peat and soils will be at least 50 m from any watercourse;
- Runoff from stored peat and soils will be managed to avoid impacts to habitats and watercourses. Where necessary, drainage control measures such as use of silt fences or straw bales will be put in place; and
- Monitoring of peat storage areas may be required during wet weather or snowmelt. This would be undertaken by the Contractor, with findings reported to the Environmental Clerk of Works.

4.7 Areas identified as potentially suitable for peat and soil stockpiles are shown on **Figure 10.2.1**.

Reinstatement and restoration

4.8 The following principles will be applied in all situations where peat is being reinstated or used in restoration:

- Reinstatement of peat turves and vegetated peat divots will ensure that surface re-vegetation is encouraged as early as possible. Vegetated peat must only be used for surface layer reinstatement and restoration.
- Re-seeding of any significant areas of bare peat will be undertaken with a suitable species mix appropriate to the surrounding habitats. Careful planning of

reinstatement should minimise areas of bare peat by appropriate distribution of vegetated peat turves and divots.

- Grazing by livestock and deer may need to be prevented in sensitive areas, by selective use of fencing, until re-vegetation has become established.
- In the event that stored peat becomes dewatered or desiccated, this material would not be exposed in the upper part of any reinstatement or restoration area in order to minimise any further character loss. Storage of excavated peat will be minimised in order to prevent or limit dewatering and desiccation.
- Where reinstatement of peat or soil is required on steeper slopes, a biodegradable geotextile may be appropriate to provide additional stability to the slope until vegetation becomes re-established.

Updated peat management

4.9 The Outline Peat Management Plan presented here would be updated and refined as necessary with further site-specific detail once site investigation results become available. This would involve recalculation of peat volumes requiring excavation and storage. Location-specific reinstatement and restoration would be specified by the Environmental Clerk of Works, taking account of specific local variation in topography and natural ground conditions. The Construction Peat Management Plan (CPMP) would be a live document, with revisions added as necessary during the construction process.

5 SUMMARY

5.1 This Outline Peat Management Plan provides an assessment of the likely volumes of peat that will require excavation during the project construction, and of the volumes of peat that can legitimately be used in reinstatement and restoration of the proposed Development's infrastructure. The assessment has included consideration of all proposed infrastructure that will require construction and excavation work where peat would require removal.

5.2 The assessment indicates that there would be a balance in peat volumes and that all peat excavated for construction would be able to be reused within the project area for reinstatement and dressing off, or for peatland restoration work within Skipness Forest. Approximately 51% of the excavated peat would be acrotelmic, which provides good opportunities for promoting re-establishment of peatland vegetation around construction areas. Sensitive reinstatement would help to minimise the visual impact of the construction works as well as minimising the habitat loss from construction of the proposed Development.

6 REFERENCES

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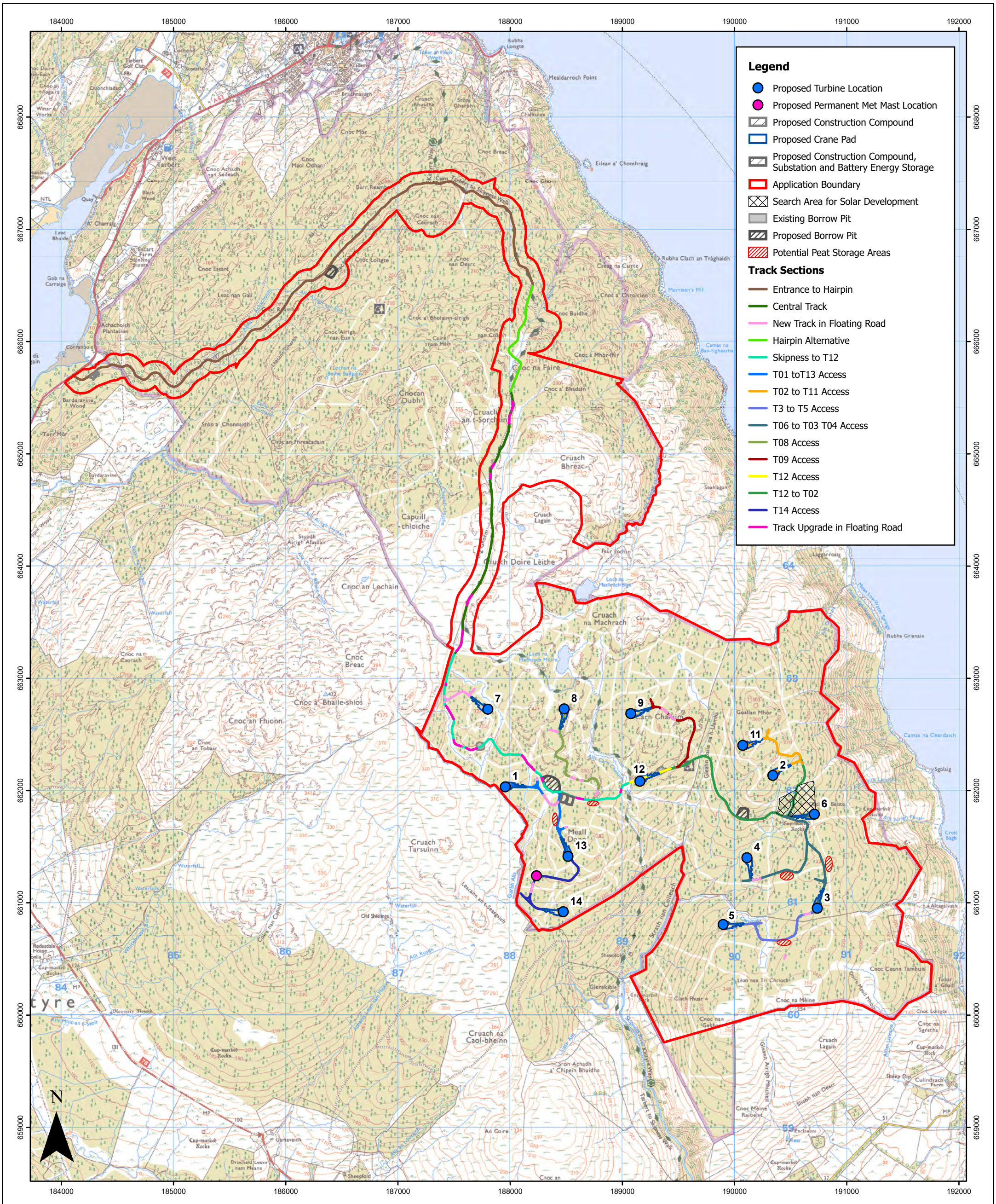
7 FIGURES



Earraghail Renewable Energy Development

Peat Management Plan

Track Sections and Potential Peat Storage Areas

Rev	Date	By	Comment
D	01/12/21	CM	Revised track and logo
E	06/12/21	CM	Updated RLB
F	18/01/22	CM	Updated turbine locations

1:31,000 Scale @ A3

0 0.25 0.5 1 Km

Figure	Date	Rev	Dwg No.	Datum: OSGB36 Projection:TM
10.2.1	18/01/22	F	EHAIL-RSK-I-063	